



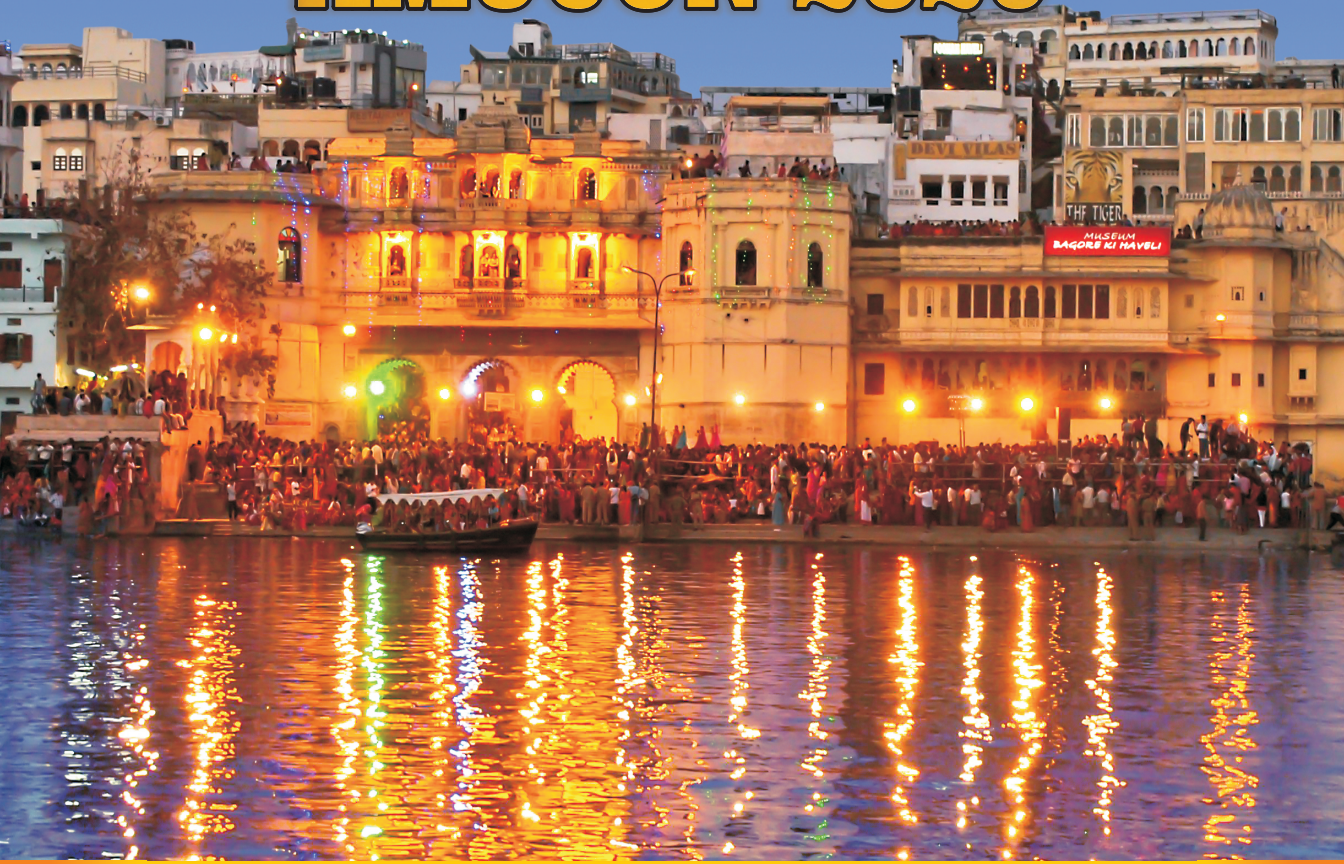
# SOUVENIR



## 3<sup>rd</sup> Annual National Conference of Association for MEDICAL UPDATES

14<sup>th</sup> - 16<sup>th</sup> February, 2020

# AMUCON 2020



Organised by : GEETANJALI MEDICAL COLLEGE & HOSPITAL, Udaipur (Raj.)





या कुन्देन्दुतुषारहारधवला या शुभ्रवस्त्रावृता  
या वीणावदण्डमण्डितकरा या श्वेतपद्मासना  
या ब्रह्माच्युतशंकरप्रभृतिभिर्देवः सदा पूजिता  
सा मां पातु सरस्वति भगवती निः शेषजाड्यापहा





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**Dr Nalini Sharma**



**Dr Medha Mathur**



## *Editorial Board*

*Dear Friends, Colleagues, and delegates, Greetings on behalf of organizing committee Wish you all a fulfilling and academically satisfying year ahead*

*I am glad that we have this opportunity to organize the 3rd Annual Conference of Association for Medical Updates on 14th – 16th February, 2020. I take this opportunity to welcome learned speakers, delegates and their spouse coming to Udaipur from all parts of country.*

*The goal of this conference is to provide a forum for interchange of knowledge and updates from various branches of medical field. Researchers from different field are invited to gather and present their work amongst fellow medical professionals. Research, updates and knowledge from this conference and souvenir is expected to spread and get imbibed into different strata of medical field.*

*This souvenir is the result of efforts of the whole editorial team and the organizing team. We thank all our well wishers and supporters without whom it would be an impossible task.*

*Once again on behalf of the members of organizing committee I extend a warm welcome to all of you and hope you will enjoy the academic fiesta at this conference as well as going through the souvenir.*



**Dr Manjinder Kaur**



**Dr Apurva Agrawal**



**Dr Nalini Sharma**



**Dr Medha Mathur**









The Souvenir is presented on the  
occasion of  
3rd Annual National Conference of  
**Association for Medical Updates**



**Geetanjali Medical College & Hospital, Udaipur**  
**14<sup>th</sup> - 16<sup>th</sup> February, 2020**

## CONFERENCE SCHEDULE AMUCON 2020

### 15 FEBRUARY, 2020 : SCHEDULE DAY – 1

- 9.00- 9.30 am : Registration and breakfast  
 9.30- 11.00 am : Symposium  
**Advancement And Reforms in Medical Education**  
 ❖ Professionalism and Ethics in Medical Education:  
 Dr. Mira Desai (Gujarat)  
 ❖ Communication skill and attitude for a successful  
 medical professional: **Dr. Vijay Sardana (Rajasthan)**  
 ❖ Assessment in competency based curriculum: A  
 paradigm shift: **Dr. Tejinder Singh (Punjab)**  
 11.00-11.15 am : 3D Printing technologies in Health care solutions:  
**Dr. Apurva Agrawal (Rajasthan)**  
 11.15-11.45 am : Immune dysregulations and therapeutic implications in  
 chronic viral infections: **Dr. S.K. Arora (PGI, Chandigarh)**  
 11.45-12.15 am : Artificial Intelligence in medical science:  
 : **Dr. K. Ganapathy (Chennai)**  
 12.15 - 1.30pm : Inauguration  
 1.30 -2.30 pm : Lunch  
 2.30 -3.00 pm : "Liquid Biopsy and its clinical applications in  
 cancer": Dr. Jatinder Bhatia (Maharashtra)  
 3.00 -5.00 pm : Paper/Poster Presentation Session Young  
 Scientist / Best Paper Award Session

### 16 FEBRUARY, 2020 : SCHEDULE DAY – 2

- 9.00- 9.30 am : Registration and break fast  
 9.30- 10.00 am : Medical law and litigations:  
 Dr. Padma Kumar K (Kerala)  
 10.00-10.45 : Psychosexual Disorders : Recent Updates  
 Dr. Jitendra Jeenger (Rajasthan)  
 10.45-11.15 am : Role of SERUM Biomarkers in Management of  
 Ovarian & Lung Cancer Dr. Deepika Jindal  
 11.15 - 12.00 pm : PG Quiz  
 12.00 -1.30 pm : Lunch  
 1.30 -3.30 pm : Paper / Poster Presentation Session  
 3.30 -5.00 pm : Valedictory Session



## Message



*Dear Dr. Ashish Sharma,*

*It is a matter of pleasure for me to note that the Geetanjali Medical College & Hospital is organizing the 3rd Annual National Conference of Association for Medical Updates at GMCH from 14th – 16th February, 2020.*

*It is also heartening to note that in these three days' conference, about 250 delegates from all over the country would be participating.*

*I wish all the success to organizing team of 3<sup>rd</sup> Annual National Conference of Association for medical Updates.*

**J.P. Agarwal**

*Chairperson*  
Geetanjali University



## Message

*It gives me pleasure to learn that Geetanjali Medical College & Hospital are going to organizing the 3<sup>rd</sup> Annual National Conference of Association for Medical Updates on 14<sup>th</sup> to 16<sup>th</sup> February, 2020.*

*The theme of the conference - Paradigm of Modern Medicine, is relevant to the current research and development in medical field.*

*I am sure in the presence of expert speakers around the country, this conference will provide new perspectives for addressing basic and clinical questions and would workout future direction for research in this area.*

*I extend my heartiest congratulations to the organisers and wish amucon 2020 all success.*

**Dr. R. K. Nahar**

Vice Chancellor  
Geetanjali University, Udaipur



## Message



*It gives me immense pleasure to know that the Deptt. of Biochemistry, Geetanjali Medical College & Hospital, Udaipur is organizing the 3<sup>rd</sup> Annual National Conference of Association for Medical Updates on 14<sup>th</sup> to 16<sup>th</sup> February, 2020 at Geetanjali Medical College & Hospital, Udaipur.*

*I extend a warm welcome to all esteemed guests, learned delegates and faculty members.*

*The medical science and technology is developing so fast that it is essential for the doctors to keep themselves updated in this field. I firmly believe that such conferences and CMEs can reduce the gap between doctors and knowledge, and their academic activities also provide the platform to exchange the views with the other colleagues for improvement in medical profession.*

*I wish the conference a great success and a memorable event.*

**Dr. F. S. Mehta**

Dean  
GMC, Udaipur



## Message

*Dear Dr. Ashish Sharma,*

*The Department of Biochemistry of Geetanjali Medical st College & Hospital is organizing the 3<sup>rd</sup> Annual National Conference of Association for Medical Updates at GMCH on 14<sup>th</sup> & 16<sup>th</sup> February, 2020 and I am glad that about 250 Delegates from all over the country would be participating in this three days conference. It is heartening to note that the Souvenir is being published in commemoration of the occasion.*

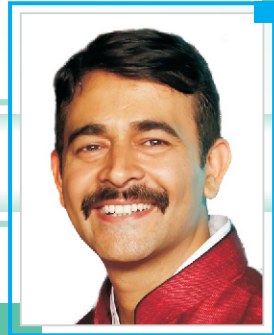
*I take this opportunity to congratulate you and your team members and wish the AMUCON 2020 a grand success.*

**Ankit Agarwal**

*Executive Director  
GMCH, Udaipur*



## Message



*On behalf of the organizing committee. I would like to express my deep sense of gratitude to all the delegates, who are coming from various parts of the country, for accepting our invitation to attend the conference. I extend a hearty welcome to you all. It is indeed a proud moment for all of us to be organizing this mega academic event in our institution.*

*I am sure all of you will cherish your stay at lake city Udaipur, the city not only known worldwide for lakes, fort, beauty but also for its warmth, well come & hospitality.*

*After all the hard days work we have great gastronomic feast to tickle your taste buds mixed with great entertainment to make your stay at Udaipur, most memorable.*

**Dr. Ashish Sharma**  
Organizing Secretary  
AMUCON-2020, UDAIPUR

# AWARD PAPERS



## AP 1.

## A STUDY OF THE CORRELATION OF SERUM VITAMIN D LEVELS TO CHILD-PUGH & MELD SCORING SYSTEM IN CIRRHOSIS OF THE LIVER

**Dr. Shaitan Singh Jat<sup>1</sup>, Dr. Hemant Mahur<sup>2</sup>,  
Dr. Jitendra Kumar Patel<sup>1</sup>**

*1PG Resident, 2Professor, Department of General Medicine, RNT MC, Udaipur (Raj)*

**Introduction:** Vitamin D is regulator of calcium and bone metabolism. The biological effects of Vitamin D are mediated by binding to Vitamin D Receptor (VDR), a superfamily of nuclear steroid hormone receptors. Several studies in patients with liver cirrhosis have shown that Vitamin D deficiency has been associated with increased mortality.

**Material and method:** This study was conducted on patients admitted to R.N.T. Medical College, Udaipur, over a period of eight months. In our study, we enrolled 100 CLD patients and 100 healthy individuals. Patients were categorized into four groups according to vitamin D levels: patients with severe deficient (<10 ng/mL), deficient (10-19.9 ng/mL), insufficient (20-29.9 ng/mL) and sufficient (≥ 30 ng/mL) vitamin D levels.

**Result:** Out of controls, 74 (74%) were males and remaining 26 (26%) were females. The mean age of controls was 43.73±13.22. It was 44.14 ± 12.32 in males and 42.54±15.91 in female controls. It was found that 91% of the CLD patients had subnormal vitamin-D levels. 20% of CLD patients had vitamin D level less than 10 ng/mL i.e. severe vitamin D deficiency. Only 9% of CLD patients had sufficient vitamin D level. The results indicated that vitamin D levels in cirrhotic patients are associated with Child-Pugh classification.

**Conclusion:** As the Child-Pugh class advances, vitamin D levels decrease. Greater proportions of poor-prognostic liver disease patients have low vitamin-D levels. Vitamin D deficiency might be a valuable indicator of severity and predictor of mortality in cirrhosis patients.

## AP 2.

**A STUDY OF DISCORDANT HIV COUPLES AT A  
TERTIARY CARE CENTRE**

**Dr Mahima Khatri<sup>1</sup>, Dr Jyotsna Chandwani<sup>2</sup>,  
Dr Geeta Parihar<sup>3</sup>, Dr V.L Rastogi<sup>4</sup>**

*1 Postgraduate Resident, 2 Senior Demonstrator, 3 Senior Professor, 4 Professor  
and Head Department of Microbiology, JLN Medical College, Ajmer (Raj)*

**Background:** Heterosexual transmission of HIV among married couples is the commonest mode of transmission seen in India. A serodiscordant couple is a couple in which one partner is HIV-positive while the other partner is HIV negative.

**Aims:** To study the serodiscordance rates among the married couples reporting at the Integrated Counseling and Testing centre (general) at Jawaharlal Nehru Hospital, Ajmer and the factors contributing to this serodiscordance.

**Methodology:** A retrospective descriptive study of data from integrated counseling and testing center (ICTC) from September 2018 to February 2019 was done, where 84 couples, where one of the spouses was HIV positive, were followed up for 6 months to check for the HIV status of the HIV negative spouse. The HIV testing of the patients was done as per the NACO guidelines and strategies.

**Results:** During the period of the study 220 people were tested to be HIV positive at the centre of which 84 were heterosexual married couples. Of these 14 couples were found to be sero-discordant, 10 couples had a positive male partner while 4 couples had a positive female partners. During the counseling it was found that 12 of these couples have been using condoms while 2 couples had refrained from sexual practices since the diagnosis.

**Conclusion:** The rate of serodiscordance is fairly low in the area, however the major reason for existing discordance is use of condom and decreased frequency of sexual practices. Interventions such as integrated counselling and testing, condom promotion, risk reduction counseling, timely initiation of ART are very effective in preventing transmission among serodiscordant couples.

## AP 3.

**STUDY OF FUNCTIONAL OUTCOME OF CORE DECOMPRESSION WITH PLATELET RICH PLASMA ENHANCED CANCELLOUS BONE GRAFT IN AVASCULAR NECROSIS OF FEMORAL HEAD GRADE I AND II****Dr. Dheeraj<sup>1</sup>, Dr. Vinay Joshi<sup>2</sup>***1 Resident, 2 Professor Department of Orthopaedics,  
RNT Medical College, Udaipur, Rajasthan*

**Introduction:** Avascular necrosis (AVN), most commonly affects femoral head. Etiology may be traumatic or non traumatic. The goal of treatment is preservation of head of femur in early stages I and II by different hip preserving methods & to delay hip arthroplasty.

**Aims and objectives:** To evaluate and discuss the results of iliac crest cancellous bone graft enhanced with platelet rich plasma and core decompression in of AVN head of femur grade I and II.

**Method and Materials:** This study was done in Deptt of Ortho., RNT MC & Hospital, Udaipur, from 1 Oct. 2018 to 30 Sep. 2019. 25 Patients (38 hips) of both sex and aged between 25 to 50 years with AVN head of femur grade I and II were treated by core decompression with platelet rich plasma enhanced cancellous bone graft. Final results were graded according to Harris hip score.

**Results:** Final Results were 10 hips (26.3%) had excellent, 17 hips (44.7%) good, 7 hips (18.4%) had fair and 4 hips (10.5%) had poor result. There was improvement in mean Harris Hip Scores by 10.1 points (73.1 to 83.2).

**Conclusion:** Pain relief was achieved and probably due to decompression, and curettage of necrotic area. Improvement in Harris hip score and delay the need for THR.

**Keywords:** AVN (Avascular necrosis), PRP (Platelet rich plasma), core decompression



## AP 4.

**ANTIBIOTIC PROTOCOLS AND SURGICAL SITE INFECTIONS IN  
CLEAN AND CLEAN-CONTAMINATED ELECTIVE SURGERIES- A  
COMPARATIVE PROSPECTIVE STUDY****Dr.Suman Parihar, Dr.Kishan Patel***Department of General Surgery, Geetanjali Medical College, Udaipur, Rajasthan*

**Introduction:** Clean and clean-contaminated surgeries don't require prolonged antibiotics. Post-operative morbidity, mortality and health care burden due to SSI is the major cause for devising new protocols. Due to overzealous use of antibiotics, antibiotic resistance is rampant.

**Aim:** This study is to compare different antibiotic protocols and its outcome on surgical site infections.

**Methodology:** Patients admitted in department of General Surgery, GMCH from January 2019 to January 2020. Group A consists of clean cases and group B of clean-contaminated cases. Through consecutive sampling, in both the groups A and B, half patient will get short term perioperative antibiotics and other half conventional post-operative long-term antibiotics.

**Results:** Total 40 patients were studied in age group 15-60 years. Incidence of SSI was less in patients receiving short term decisive antibiotics in clean cases. In clean- contaminated cases the incidence was overall same. Superficial SSI were most commonly encountered.

**Conclusions:** Short term perioperative antibiotic is better than post-operative long-term antibiotics. Short term antibiotic in decisive period is not only effective and efficacious but also reduce the cost, side effects and microbial resistance.

**AP 5.****MANAGEMENT AND OUTCOME OF ABDOMINAL WALL  
CLOSURE IN EMERGENCY LAPAROTOMY: A ONE YEAR  
PROSPECTIVE STUDY****Dr. Pankaj saxena, Dr. Poojan Thakor***Department of General Surgery, Geetanjali Medical College, Udaipur, Rajasthan*

**Introduction:** Closure of Emergency laparotomy wound involves a gamut of technical considerations viz. sutures material and surgical technique. The goal to wound closure is to restore function of abdominal after a surgical procedure.

**Aims:** Compare the postoperative outcome, complications, suture materials and techniques for layered closure and mass closure in emergency laparotomy.

**Methodology:** Patients taking treatment in the emergency unit of the department of General Surgery, GMCH. In this prospective study, patients under Group 1 underwent mass closure and under Group 2 layered closure with non-absorbable or absorbable and continuous or interrupted technique. Patients were followed up for 3 months.

**Results:** Total 40 patients were studied. Male outnumbered females. Mean time for mass closure is less than layered closure. Layered closure had more complications like seroma, wound infection, wound dehiscence, burst abdomen. Incisional hernia had more incidence in mass closure than layered closure.

**Conclusions:** Mass closure of abdomen is better than layered closure but it has disadvantage of incisional hernia; the technique applied will be surgeons preference.

## AP 6.

## A STUDY OF SYSTEMIC MARKERS OF INFLAMMATION ON ALCOHOLIC SUBJECTS IN THE TERTIARY CARE CENTRE OF KUMAON REGION

**D.P.Shukla<sup>1</sup>, Sangeeta Singh<sup>2</sup>, Seema Gupta<sup>3</sup>, Ashok Kumar<sup>4</sup>**

*1 PG Student, 2 Associate Professor, 3 Assistant professor, 4 Associate professor 1, 2, 3*

*Department of Biochemistry, G.M.C. Haldwani, Uttarakhand, India*

*<sup>4</sup>Department of Medicine, G.M.C. Haldwani, Uttarakhand, India*

**Introduction:** Alcohol is known to contribute to inflammation upon heavy consumption. Inflammation plays an important role in manifestation of numerous diseases. Several systemic biomarkers, through their circulatory levels, may indicate the level of inflammation. However, various epidemiological studies suggest that moderate alcohol intake is associated with lower mortality as compared to abstinence or heavy drinking, primarily due to lowered incidence of vascular accidents. Alcohol drinking has been associated with low grade inflammatory changes which can be depicted as changes in the levels of inflammatory markers, although it has been observed to have anti inflammatory effects when used in moderation.

**Aims:** To estimate the biomarkers of inflammation – serum hs-CRP, serum Lp(a), serum albumin, serum uric acid and ESR, TLC in alcoholic subjects and their age and sex matched non alcoholic controls, to study the association between the levels of inflammatory biomarkers and the degree of alcohol consumption & to study the correlation between the different parameters of inflammatory markers in alcoholic subjects.

**Methodology:** Study population consisted of 100 alcoholic subjects and 50 age and sex matched controls in the age group of 25-60 years. Alcoholic subjects were classified into different categories based on their alcohol consumption in terms of drinks per. Serum high sensitivity C-reactive protein (hs-CRP) and lipoprotein-a (Lp-a) were estimated by turbidimetric immunoassay, serum uric acid was measured by enzymatic(uricase) method and serum albumin was measured by dye binding method (bromocresol purple). Total leucocyte count (TLC) was counted by volumetric impedance method and Wintrobe's method was used for erythrocyte sedimentation rate (ESR) estimation.

**Results:** Mean serum hs-CRP, serum uric acid, serum Lp-a level and the mean value of ESR were significantly raised ( $p < 0.05$ ) in cases as compared to controls. The mean serum hs-CRP level in the moderate and heavy drinkers was significantly lower ( $p < 0.05$ ) as compared to occasional and low-moderate drinkers. The mean serum uric acid, serum albumin level and mean value of ESR in moderate and heavy drinkers were significantly higher ( $p < 0.05$ ) as compared to occasional and low-moderate drinkers. In our study, serum hs-CRP levels had significant positive correlation with ESR ( $0.050$ ;  $p < 0.05$ ).

**Conclusion:** Our study showed significantly low level of biomarkers of inflammation in occasional, low-moderate and moderate drinkers. There was a significant rise in inflammatory markers in heavy alcohol drinking. This suggests a beneficial effect of moderate alcohol intake but a large scale study needs to be done to confirm the above mentioned findings.



## AP 7.

## A STUDY TO COMPARE THE EFFECT OF TRAFFIC NOISE IN TRAFFIC POLICEMEN AND HEALTHY CONTROLS BY AUDITORY BRAIN STEM EVOKED RESPONSE

**Manoj Kumar<sup>1</sup>, Sangeeta Vyas<sup>2</sup>**

*1Post Graduate Student (MD), 2Senior Professor Department of Physiology,  
SMS Medical College, Jaipur, Rajasthan*

**Background:** Loud noise is a global occupational health hazard with considerable social and physiological impacts, especially in traffic policemen engaged in controlling traffic, at heavy traffic junctions. Apart from sensory neural hearing loss, loud noise has been reported to cause disturbances in sleep, learning and depression. Auditory brain stem evoked response (ABR) can objectively assess functional status of auditory pathway.

**Aim:** The present study is aimed at assessment and comparison of the effect of traffic noise in traffic policemen and in age matched healthy male controls by using ABR.

**Methodology:** The present study is conducted in the Department of Physiology, S.M.S. Medical College, Jaipur, on 45 apparently healthy male traffic policemen, aged 25-40 years, engaged at heavy traffic junctions of Jaipur city, with field posting of five years or more at heavy traffic junction. An equal number of age and gender matched apparently healthy subjects living in the Jaipur city were recruited as controls. Subjects with any upper airway or ear disease, family history of deafness, any acute or chronic illness, alcoholism, smoking and those on medications known to affect auditory functioning were excluded from the study. Before beginning of the study, ethical clearance was obtained from institute's ethics committee and a written informed consent was taken from each subject. ABR assessment is done and the study variables evaluated were wave latencies (I to V) and inter peak latencies (I-III, III-V, I-V).

**Results and Conclusion:** This is an ongoing study and the current trends of the study indicate at prolonged wave and inter-peak latencies in traffic policemen as compared to controls. Long term exposure to loud noise in traffic policemen can lead to permanent hearing loss. Periodic ABR assessment, using safety equipment and creating awareness among traffic policemen might prevent the hearing loss.

**Key words:** Auditory brainstem evoked response (ABR), traffic policemen, noise, hearing loss and latency.

## AP 8.

**THE RELATIONSHIP BETWEEN SERUM TRIGLYCERIDE LEVEL AND HEART RATE VARIABILITY IN TYPE- 2 DIABETIC PATIENTS**

**Dr. Fareeda Banu A B<sup>1</sup>, Dr. Neeta Deshpande<sup>1</sup>, Dr. S B Javali<sup>1</sup>,  
Dr. Darshit P Shetty<sup>1</sup>, Dr. Jyoti Benni<sup>2</sup>**

*1 Associate Professor, 2 Assistant Professor Department of Physiology,  
USM-KLE IMP, Belagavi, Karnataka*

**Background:** Diabetes is associated with an increased risk of mortality and morbidity from cardiovascular disease (CVD) which is mainly because of dyslipidemias. Some research has suggested that increased serum lipid fractions such as low-density lipoprotein cholesterol (LDL-C) and Total cholesterol (TC) were linked to decreased heart rate variability (HRV). So far no correlation has been established between serum triglyceride (TG) values and HRV.

**Aim:** The objective of the present study was to study the relationship between serum TG and HRV in Type 2 diabetic patients.

**Methodology:** The study included 120 Type 2 diabetic patients. One minute HRV was analyzed during deep breathing and defined as the difference between the shortest and the longest heart rate interval measured by lead II electrocardiographic recording during six cycles of deep breathing using an Electrocardiograph (BPL Cardiaart6208). Kubios HRV Standard (ver 3) software tool was used to analyze HRV. Fasting serum TG of all the patients (5ml of venous blood) was analyzed using auto analyzer.

**Results:** No significant difference was observed in the TG levels ( $p > 0.05$ ) between the three diabetic groups. The TG levels were significant and negative relationship was observed with HRV ( $r = 0.6141$ ,  $p = < 0.001$ ) at 5% level of significance in all the three groups.

**Conclusion:** From the present study we conclude that the hypertriglyceridemia in type 2 diabetic patients is very hazardous as it increases the incidence of cardiovascular abnormality which is indicated by decrease in HRV.

**Keywords:** Type 2 diabetes, Heart rate variability, Triglycerides

## AP 9.

**IMPACT OF PATIENT EDUCATION ON INSULIN INJECTION  
SITE LIPOHYPERTROPHY**

**Dr. Ranjana Sahasrabudhe<sup>1</sup>, Dr. Chittaranjan Yajnik<sup>2</sup>,  
Dr. Kalpana Jog<sup>3</sup>, Dr. Arun Kinre<sup>4</sup>, Dr. Vijaya Pandit<sup>5</sup>**

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**Background:** Insulin is the life line for T1DM patients. Hypoglycaemia and Lipohypertrophy (LH), the adverse effects of Insulin, have significant clinical implications. Insulin injection site LH leads to erratic insulin absorption, viciating the Diabetes Control. Incorrect injection practices have been implicated as the strongest predisposing factor for development of LH.

**Aim:** Present study was undertaken to assess the impact of patient education on resolution of Lipohypertrophy in T1DM patients.

**Methodology:** 210 T1DM patients attending diabetes OPD of a tertiary care hospital were enrolled after informed written consent. Insulin injection sites (arms, thighs, abdomen) were inspected by observation, palpation and Ultrasonography. Each site was scored for severity of LH, ranging from 0 (No LH) to 4 (Massive Localized LH). Patients or care givers of young patients were interviewed to get basic demographic and medical details and their selfcare practices. Gaps observed in knowledge and practices were corrected, focusing on improving the insulin injection technique, particularly injection point rotation. LH and associated parameters were assessed 1 year later in randomly selected 82 patients to see the impact of this in-depth counselling.

**Results:** At enrolment, 79% patients had visible Lipohypertrophy at atleast one of the injection sites used. After 1 year, LH was reduced, reflected by the reduction Total LH Score and Number of Sites affected (19.5% and 13.3% respectively,  $p < 0.05$ ). There was associated improvement in insulin effect (8.8% reduction in HbA1c,  $p < 0.05$ ) and 5.5% reduction in average Total Daily Dose of Insulin.

**Conclusions:** Focused patient education can help improve injection practices and reduce LH.

## AP 10.

**TO COMPARE EFFICACY AND SAFETY OF TOPICAL  
PREPARATION OF FLUTICASONE PROPIONATE VERSUS  
TACROLIMUS IN TREATMENT OF ATOPIC DERMATITIS: A  
PROSPECTIVE, RANDOMISED OPEN LABEL STUDY**

**Dr Vinodhini 1, Dr Alok Dixit 2, Dr. Asha Pathak 3, Dr Sweta Kumar<sup>4</sup>**

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**Background:** Atopic dermatitis (AD) is a chronic recurrent inflammatory skin condition, afflicting 15-20% of children. AD also adversely affects the quality of life (QoL) of the patients. Fluticasone propionate (FP), a corticosteroid, acts by reducing the skin inflammation; and tacrolimus, a calcineurin inhibitor acts by inhibiting the T lymphocytes are used for management of AD.

**Aims:** To compare efficacy of FP and tacrolimus in lowering the severity of disease, to assess QoL, and to estimate if any association exists between them.

**Methodology:** 37 AD children were randomly divided in 1:1 ratio and put on either of the two topical treatments for first 4 week of daily application in acute phase and continued into next 4 week maintenance phase, twice weekly application. The severity of disease was assessed using SCORing Atopic Dermatitis (SCORAD) and QoL was assessed by using Children's Dermatology Life Quality Index (CDLQI).

**Results and Conclusion:** At the end of acute phase, there was reduction in SCORAD score by 69.29% in FP and 64.20% in tacrolimus group. In maintenance phase, the score had risen in FP group by a mean difference of 0.81 while in tacrolimus, it decreased by 0.99. Both FP and tacrolimus groups improved children's QoL ( $P < 0.001$ ). Positive correlation ( $r = 0.4668$ ) exists between the SCORAD and QoL. Skin burning was the most common ADR seen with tacrolimus. In conclusion, FP and tacrolimus are equally efficacious in the treatment of AD, with similar benefits on children's QoL. For maintenance, tacrolimus is better in reducing risk of relapse than FP.



## AP 11.

**PREVALENCE AND DEMOGRAPHICAL VARIATION OF ASTHMA  
COPD OVERLAP (ACO) IN PREVIOUSLY DIAGNOSED OAD  
PATIENTS OF SOUTHERN RAJASTHAN**

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**Background:** Asthma COPD overlap (ACO) is widely gaining recognition as separate phenotype of chronic obstructive airway disease with distinct treatment and prognosis. It is an important challenge of accurately diagnosing ACO.

**Aims:** To estimate the prevalence of ACO among patients previously diagnosed as obstructive airway disease and compare their demographical profile.

**Methodology:** This was observational study of 351 patients with obstructive airway disease visited at our center between 2018-2019. A detailed chart review including demographic, clinical, laboratory investigations, spirometry, and radiological findings were recorded in pre-structured proforma. The diagnosis of ACO was based on GINA/GOLD criteria 2019.

**Results:** Of the total (n=351), ACO was diagnosed in 109 (31.05%) patients. Female predominance 61 (55.96%) patients was observed. There was a significantly higher incidence of comorbidities and wheeze, nasal symptoms, family history of atopy, as compared to obstructive airway disease. There was no significant difference in radiological findings between two groups.

**Conclusion:** ACO represents a large proportion (31.05%) of obstructive airway disease patients with female predominance, higher comorbidities. GINA/GOLD criteria 2019 are important questionnaire to differentiate ACO from obstructive airway disease with limited role of chest imaging. The study results have implications for earlier identification and appropriate treatment of this distinct clinical phenotype.

## AP 12.

**INDUCIBLE CLINDAMYCIN RESISTANCE IN STAPHYLOCOCCUS AUREUS ISOLATES IN TERTIARY CARE HOSPITAL IN SOUTHERN RAJASTHAN****Dr Deepika Atray<sup>1</sup>, Dr Anshu Sharma<sup>2</sup>***1 PhD Scholar, 2 Senior professor Department of Microbiology, RNT Medical College, Udaipur (Raj)*

**Introduction:** Increase in the prevalence of  $\beta$  lactam resistance in staphylococcal infection has led to renewed interest in use of macrolide lincosamide-streptogramin B antibiotics for treatment. The routine testing for clindamycin susceptibility fails to detect inducible clindamycin resistance due to *erm* genes resulting in treatment failure, thus detection by a D test is necessary.

**Aim:** Assessing the inducible clindamycin resistance using D test in clinical isolates of *Staphylococcus aureus*

**Methodology:** A total of 100 *staphylococcus aureus* isolates were tested for routine antibiotic susceptibility by Kirby bauer method and inducible clindamycin resistance using D test.

**Result:** Out of 100 samples, inducible resistance to clindamycin was seen in 30% isolates and constitutive resistance in 14% isolates. Out of these, inducible and constitutive resistance is higher in MRSA (39% and 30%) as compared to MSSA (22% and 0%)

**Conclusion:** Clindamycin being a reserve drug in staphylococcal skin and soft tissue infections should be tested for inducible resistance to avoid treatment failure.

## AP 13.

## CLINICOPATHOLOGICAL CORRELATION IN LUPUS NEPHRITIS

**Dr. Ranjana Solanki<sup>1</sup>, Dr. Deepika Hemrajani<sup>2</sup>, Dr. Anu Sahjlan<sup>3</sup>***1Senior Professor, 2Associate Professor, 3Resident Department of Pathology, SMS Medical College & Hospital, Jaipur*

**Background:** The role of renal biopsy in lupus nephritis is to provide diagnosis and to identify parameters of prognostic and therapeutic significance for a good clinicopathological correlation. The points neglected so far for prognostication are tubulointerstitial involvement and the NIH activity and chronicity score.

**Aim:** An attempt is made in the current study to look for significance of tubulointerstitial involvement and activity and chronicity with the class of LN and also to look at clinical parameters like S.Creatinine and proteinuria with the class of LN.

**Material and methods:** All the cases of LN received from 2016 to 2019 were retrieved and reclassified according to ISN/RPS Classification 2018. The association of S.Creatinine, proteinuria, tubulointerstitial changes and activity and chronicity indices were correlated with the class of LN.

**Results:** Out of 24 patients enlisted, 19 were females and 5 males. No significant association was found between S.Creatinine, proteinuria with class of LN. However, increased endocapillary hypercellularity (75%) was associated with class IV than class III. Hyaline deposits were also seen more in class IV (62.5%).

**Conclusion:** Some parameters are associated with higher class of LN as compared to other activity parameters. It is important therefore to indicate individual activity and chronicity score for each parameter separately to find out which parameter may be significant for therapy and prognostication. No association with the chronicity and clinical parameters like proteinuria and creatinine levels was found with the class of LN.

## AP 14.

**STUDY OF SERUM UROMODULIN AND SERUM NEUTROPHIL GELATINASE ASSOCIATED LIPOCALIN CONCENTRATION IN CHRONIC KIDNEY DISEASE PATIENTS****Dr. Shubham Maheshwari<sup>1</sup>, Dr. G.G. Kaushik<sup>2</sup>, Dr. Deepa Thadani<sup>3</sup>***1PG Resident, 2 Senior Professor, 3 Senior Professor and HOD Department of Biochemistry, JLN Medical College, Ajmer (Rajasthan)*

**Introduction:** Serum uromodulin and lipocalin 2 serve as a marker for kidney function. Uromodulin is found in both CKD and healthy individuals while lipocalin level rises in acute kidney injury (AKI) and in patients have faster decline in kidney function.

**Aims:** To find out correlation of serum uromodulin concentrations and Neutrophil gelatinase-associated lipocalin 2 (NGAL2) in patients with stages 2 to 4 of Chronic Kidney disease.

**Methodology:** Study involved 120 patients divided in Case group (60 patients) attended medical/ urology OPD or admitted in medical/urology ward of CKD2 – CKD4 while control group – age and sex matched healthy individuals/ stage I CKD patients was taken as control. The plasma/ serum were used for serum urea, creatinine, CystatinC, uromodulin and lipocalin 2 under all aseptic precaution on receiving consent.

**Result:** The patients of CKD included in study were having glomerulonephritis (46.7%), pyelonephritis (21.7%), diabetic kidney disease (13.3%), polycystic kidney disease (1.7%) and other causes (16.7%). CKD patients demonstrated elevated serum NGAL  $159.14 \pm 48.73$  ng/ml, serum Uromodulin 209.7 ng/ml (range 153.8–312.6) together with a rise in serum creatinine  $1.56 \pm 0.97$  mg/dL and CystatinC  $199 \pm 113$  ng/ml as compared to control have serum NGAL  $76.31 \pm 26.34$  ng/ml, serum Uromodulin 68.8 ng/ml (range 38.9–108.3), serum creatinine  $0.75 \pm 0.14$  mg/dL and CystatinC  $76 \pm 17$  ng/ml (P value <0.05).

**Conclusion:** Serum NGAL and Uromodulin closely correlates with serum CystatinC, creatinine, and eGFR, and serve as a potential early and sensitive marker of impaired kidney function/ kidney injury.



AP 15.

## SERUM BETATROPHIN, SERUM IRISIN AND THEIR ASSOCIATION WITH INSULIN RESISTANCE IN WOMEN WITH POLY CYSTIC SYNDROME

**Dr. GG Kaushik<sup>1</sup>, Dr Deepa Thadani<sup>1</sup>, Dr Poonam Choudhary<sup>2</sup>**

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**Background:** Poly cystic ovary syndrome is the primary cause of anovulatory infertility and affects up to 10% of women of reproductive age. The exact pathophysiology of PCOS is complex and remains largely unclear, however the aetiology of PCOS is underpinned by both insulin resistance and hyperandrogenism. Insulin resistance occurs in approximately 80% of women with PCOS and occurs independently of obesity. Betatrophin and irisin are induced as a result of insulin resistance. In fact, most women with PCOS display impaired glucose tolerance and are at high risk for developing T2DM. Betatrophin and irisin have a close relationship with insulin resistance and T2DM.

**Objective:** The aim of this study is to determine the serum levels of betatrophin and irisin in PCOS patients and to find out the association of betatrophin and irisin with insulin resistance in women with polycystic ovary syndrome.

**Method:** Eighty- five PCOS patients [according to Rotterdam PCOS consensus criteria] and eighty –five healthy controls of similar age group were enrolled to study. Serum betatrophin, serum irisin levels, anthropometric, hormonal and metabolic parameters including HOMA-IR measured

**Results:** Serum irisin levels [mean value  $0.485 \pm 0.139 \mu\text{g ml}$ ] and serum betatrophin levels [ $680.3 \pm 22.7 \text{pg ml}$ ] are significantly elevated when compared to control group. Linear regression analysis showed that serum irisin and betatrophin are positively associated with body mass index, luteinizing hormone, fasting insulin and total cholesterol.

**Conclusion:** Serum betatrophin and serum irisin levels of PCOS patients are high compared to that of healthy control subjects. In patients with PCOS, this situation may be due to insulin resistance.

## AP 16.

**CARDIAC TROPONIN I IN ACUTE EXACERBATION OF  
CHRONIC OBSTRUCTIVE PULMONARY DISEASE****Dr Pranav Gupta, Dr Lalit Shrimali***Department of Medicine, GMCH, Udaipur*

**Background:** Chronic obstructive pulmonary disease (COPD) is a major cause of mortality and morbidity. It is the fourth leading cause of death worldwide. Acute exacerbations of COPD are common and are associated with worsening lung function and mortality.

**Aims:** To evaluate the prevalence of elevation of cTnI in patients admitted with acute exacerbation of COPD and to study its association with the need for ventilator support, length of hospital stay, and in-hospital mortality.

**Methods:** In a prospective design, 50 patients admitted to our hospital with acute exacerbation of COPD were included. cTnI was assayed in a blood sample obtained at admission and 24 h later. Levels above 0.017 µg/L were taken as positive. The following data were also recorded—demographic data, pattern of tobacco use, clinical symptoms and signs, comorbidities, Glasgow Coma Scale, arterial blood gas, electrocardiogram/two-dimensional echocardiography, chest X-ray, and peak expiratory flow rate.

**Results:** Among the 50 patients, 4 were females, and 46 were males. cTnI was positive in 32% of patients with a mean value of 0.272. Patients with cTnI positive were taken as Group I and those with negative were included in Group II. Prevalence of comorbidities was higher in cTnI positive group, so was the duration of COPD. cTnI elevation correlated significantly with the need for ICU admission and ventilator support..

**Conclusion:** cTnI is elevated in a significant subset of patients with acute exacerbation of COPD. Duration of their illness was longer, higher incidence of ischemic heart disease was also found in these patients. Patients with cTnI elevation are more likely to require ICU care and ventilator support. However, it did not predict in-hospital mortality. Thus, it can be used as a marker to identify high-risk patients during acute exacerbation of COPD.

## AP 17.

## EVALUATION OF SPEED AND CO-ORDINATION AMONG WRESTLERS BY REACTION TIME ANALYSIS AND AGILITY TEST-A CROSS SECTIONAL STUDY

**Dr Savita Hiremath<sup>1</sup>, Dr Parwati P Patil<sup>2</sup>, Dr Shivprasad S Goudar<sup>3</sup>**

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**Background:** Wrestling is a physical chess match featuring moves and counter moves, endurance, strength, intelligence, and quickness. Wrestling demands a high degree of muscular co-ordination skills, speed, great agility. The swiftness of these actions is of the greatest importance in the game. Agility is the physical ability which enables an individual to rapidly change body position and direction in a precise manner.

**Objectives:** To assess the reaction time, and agility among wrestlers and healthy controls.

**Methodology:** 35 wrestlers aged between 18 to 25 years who were practicing regularly in Belgaum district stadium were recruited. 35 age and sex matched students of KLE University, Belgaum were enrolled as controls. Audio-Visual Reaction time was done using Audio-Visual reaction time analyser. Agility was assessed by Illinois agility test.

**Results:** The data was analysed by using Student unpaired 't' test ( $p < 0.05$  was considered as significant). Audio-visual reaction time was significantly lesser in players than in controls. Mean agility was significantly lesser in players than in the controls.

**Conclusion:** Changes in Reaction Time may be an indicator of nervous system adaptation due to long-term training. The faster reaction time in the players may be due to improved concentration, alertness and better muscular co-ordination. The study also indicates that better Reaction Time may be useful in having a higher agility in the players. These changes may be useful in improving performance of the wrestlers.

**Keywords:** Wrestlers, speed, agility

## AP 18.

## A PROSPECTIVE STUDY TO COMPARE THE EFFICACY OF VILAZODONE AND ESCITALOPRAM IN THE TREATMENT OF PATIENTS WITH NEWLY DIAGNOSED MAJOR DEPRESSIVE DISORDER

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**Background:** As there are a lot of anti-depressant drugs available in the market, a thorough knowledge of efficacy of the commonly used antidepressants is necessary for doctors so that they can prescribe the best drug molecule to the patient. This can improve the compliance and therapy outcome.

**Objectives:** The aim is to compare the efficacy of Vilazodone and Escitalopram in the treatment of patients with newly diagnosed major depressive disorder in a prospective study.

**Materials and Methods:** 200 patients attending the psychiatry out-patient department diagnosed with major depressive disorder were assessed; and classified into vilazodone and escitalopram treatment group. Hamilton depression rating scale score was used to assess the severity of depression disorder at regular intervals.

**Results:** Maximum cases were in the 21-30 age group and minimum cases in above 60 years age group. Males contributed maximum to number of depression cases with respect to females in both the treatment groups. In the escitalopram and vilazodone therapy group, the onset of improvement was seen at the end of 1<sup>st</sup> week itself. In all the age groups, males dominated in the case numbers.

**Conclusion:** The efficacy of both treatment arms in reducing IOP is comparable till 2<sup>nd</sup> week of treatment, but at 6<sup>th</sup> month Vilazodone tablet was more efficacious than Escitalopram therapy.

# FREE ORAL PAPERS





**DIGITAL GANGRENE: A RARE COMPLICATION IN SCRUB TYPHUS**

**Dr. Mahesh Dave<sup>1</sup>, Dr. Saurabh Jain<sup>2</sup>, Dr. Archana Gokhroo<sup>3</sup>,  
Dr. Rahul Vijaywargiya<sup>4</sup>, Dr. Nagraj<sup>2</sup>, Dr. Bhavesh Joshi<sup>2</sup>**

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Scrub typhus or bush typhus is one of the most common zoonotic disease which is predominantly endemic in Asia pacific regions. This disease is predominantly seen in monsoon and post monsoon season and has high fatality rate. Clinical presentation of scrub typhus may be variable which range from mild febrile illness to multi organ dysfunction syndrome and possible pathophysiology may be due to diffused vasculitis to focal vasculitis. Focal vasculitis of digital vessels may lead to digital gangrene may be a rare association in scrub typhus patients. Hence, we are reporting a patient of scrub typhus developed digital gangrene during acute phase of the disease.

**Key words:** scrub typhus, gangrene, vasculitis

## OP 2

**A STUDY ON SERUM AMYLASE LEVELS IN ACUTE  
ORGANOPHOSPHOROUS POISONING IN A TERTIARY CARE  
CENTRE OF SOUTH-EASTERN RAJASTHAN**

**Dr. Hemant Kumar Chandel**

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**Introduction:** Organophosphorus is poisoning producing clinical alterations in the serum amylase and lipase activity. Earlier plasma cholinesterase level was used to assess the severity of poisoning. Presently serum amylase is being recommended as a better indicator of severity.

**Aims and Objectives:** The present study was undertaken to estimate serum amylase levels in acute organophosphate poisoning and to correlate serum amylase levels with outcome of patient.

**Methods:** This cross sectional study was conducted in Jhalawar medical college, Jhalawar. A total of 60 patients with organophosphorus poisoning admitted to the hospital during the study period of 1<sup>st</sup> June 2019 to 30th October 2019 were included in the study. Biochemical evaluation which includes serum amylase, blood glucose, urea and creatinine were analysed.

**Results:** In OP poisoning patients, the amylase levels were significantly elevated at the time of admission (183.3 U/L) and have shown a gradual remission with proper treatment. The mean amylase level in severely poisoned patients was 297.4 U/L. The bad prognostic factors, very well correlated with serum amylase levels were Pinpoint pupil- 305 U/L, Fasciculations-313 U/L, Severe secretions-323 U/L, CNS depression-340U/L, Respiratory failure-362 U/L and Convulsions-399U/L.

**Conclusion:** Serum amylase levels may be considered as a marker of Organophosphorus intoxication, since it enables the early recognition of severity and to identify those at risk of developing the complications of Organophosphorus poisoning.

**Keywords:** Organophosphorus poisoning, Serum amylase, Serum creatinine, Blood glucose

## SITUS INVERSUS TOTALIS WITH ATRIAL SEPTAL DEFECT: A RARE ASSOCIATION

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Situs Inversus Totalis is the complete inversion of position of the thoracic and abdominal viscera. It may be isolated or associated with malformations, especially cardiac and/or alimentary. Usually it remains asymptomatic and is discovered as an incidental finding in adulthood, but sometimes it may be discovered during infancy itself due to associated anomalies. We report a 19-year-old male found to have situs inversus totalis in association with Atrial Septal defect (ASD) while presenting to a medical OPD. This incidental finding situs inversus totalis in association with Atrial Septal defect (ASD) was detected by physical examination and was confirmed later by echocardiogram and other radiological studies. This report underscores the need for proper and complete physical examination with special emphasis on cardiovascular system examination for patients presenting with dextrocardia/situs inversus.

**KEYWORDS:** Situs Inversus Totalis, Atrial Septal defect, Congenital Heart disease.

## OP 4

## A STUDY TO ASSESS THE ASSOCIATION BETWEEN COLONOSCOPIC FINDING & UPPER GASTROINTESTINAL ENDOSCOPY FINDINGS IN PATIENTS WITH PORTAL HYPERTENSION

Dr Vipin Mathur<sup>1</sup>, Gurdeep Kaur<sup>2</sup>, Jainendra Sharma<sup>3</sup>, Ranjana Veerwal<sup>3</sup>, Rajesh Prajapati<sup>4</sup>, Rajveer Bunkar<sup>3</sup>

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**Introduction:** Portal hypertension and its complications are the leading causes of death and liver transplantation, in patients with cirrhosis. Portal hypertension causes hemodynamic and mucosal changes in the entire gastrointestinal (GI) tract. These mucosal changes in upper and lower gastro intestinal tract result in various hemorrhagic manifestations.

**Methodology:** This study was conducted in RNT Medical College and attached hospitals, Udaipur, Rajasthan. The objective of study was to find relationship between colonoscopic finding and upper GI endoscopy finding in portal hypertension patients. A total of 100 patients' diagnosed cases of portal hypertension were included in study. A predesigned and pretested Performa were used for obtaining information regarding socio-demographic variables and laboratory investigations including upper GI endoscopy and colonoscopy at endoscopy laboratory.

**Result:** In present study, 75% patient had esophageal varices and 93% patient had portal hypertensive gastropathy. Rectal varices, rectopathy and portal hypertensive colopathy were found in 57% of cases, 39% cases and 32% cases respectively. While hemorrhoids were found in 53% of cases. Among the patients who had esophageal varices, rectal varices were present in 64%. In patients without esophageal varices, rectal varices was present in 36%. Association was found statistically significant ( $p = 0.01$ ). There was no statistical significant association found between esophageal varices and other colonic lesions like rectopathy, colopathy and haemorrhoids. In present study there was no statistically significant association between portal hypertensive gastropathy and portal hypertension related colonic lesions (PHC, rectal varices, rectopathy and hemorrhoids).

**Conclusion:** Upper gastro intestinal lesions gastropathy and esophageal varices are more common finding than lower gastro intestinal lesions. Rectal varices are only significant lower gastro intestinal finding on colonoscopy among the patients of portal hypertension who had esophageal varices on upper GI endoscopy.

**Key Words:** Portal Hypertension, Colonoscopy, Endoscopy, Esophageal varices.

## OP 5

**FAHR'S DISEASE: A RARE NEURO- DEGENERATIVE DISORDER****Dr Ramit Singh Pala<sup>1</sup>, Dr Mahesh Dave<sup>2</sup>, Dr Archana Gokhroo<sup>2</sup>***<sup>1</sup>Resident, <sup>2</sup>Senior Professor Department of General Medicine, RNT MC, Udaipur (Raj)*

Fahr's disease is a rare, autosomal dominant/sporadic inherited neurological disorder characterised by abnormal deposits of calcium in areas of Basal Ganglia, Thalamus, Hippocampus, Cerebral cortex, Cerebellum, and Dentate Nucleus. Clinical manifestations of this disease incorporate a wide variety of symptoms, ranging from neurological symptoms involving extrapyramidal system to neuropsychiatric abnormalities of memory and concentration to movement disorders including Parkinsonism, chorea, and tremors. These symptoms generally occur later in the course of the disease. Age of onset is typically in the 40s or 50s, although it can occur at any time during life. We are presenting a case of Fahr's disease in a 56-year-old female who presented with chronic headache, focal seizures, Parkinsonism and psychiatric symptoms.

**KEY WORDS:** Fahr's disease, Basal Ganglia Calcification, Parkinsonism, Neuro-degeneration.



## OP 6

## EVALUATION OF SERUM LACTATE AS PREDICTOR OF MORBIDITY AND MORTALITY IN SEPTIC SHOCK AND MULTI-ORGAN DYSFUNCTION SYNDROME PATIENTS IN TERTIARY CARE HOSPITAL

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*Department of Medicine, RNT MC, Udaipur (Raj)*

**Introduction:** In 1992 Bone and colleagues defined four sepsis-related clinical syndromes. These four syndromes were defined in pathophysiologic terms as a hierarchy corresponding to four steps of increasingly exaggerated inflammatory responses- Systemic inflammatory response syndrome (SIRS), sepsis, severe sepsis and septic shock.

**Aims & Objectives:** To evaluate serum lactate as predictor of morbidity and mortality in septic shock and multi-organ dysfunction syndrome patients.

**Material & Methods:** This study was performed in R.N.T. Medical College, Udaipur (Rajasthan) on 50 age and sex matched healthy control and suspected/confirmed sepsis/ MODS in the intensive care unit. A venous blood sample was taken at 0 hr, 12 hr and 24 hrs in lactate tubes to measure serum lactate in mg/dl by Enzymatic UV test method as per standard protocol.

**Results:** Significantly higher level of serum lactate in patients who had died and who had >7 days ICU stay, compared to patients who had <7 days ICU stay or healthy controls (p value <0.001). Higher level of serum lactate seen in patients with septic shock and MODS compared to patients only sepsis or without MODS (p value <0.001). Patients who had serum lactate >36 mg/dl at admission and remained persistently higher at 12 hrs and 24 hrs had high mortality and morbidity compared to patient having serum lactate level <36 mg/dl.

**Conclusion:** Thus serum lactate can be considered a new, cost-effective and reliable tool in assessment of prognosis of septic shock and multi-organ dysfunction syndrome.

## OP 7

## THYROID PROFILE IN TYPE 2 DIABETES MELLITUS

**Dr Mahesh Dave<sup>1</sup>, Dr Hazari Lal Saini<sup>2</sup>, Dr Ankit Gupta<sup>2</sup>,  
Dr Jitendra Choudhary<sup>3</sup>, Dr Aniruddha Burli<sup>3</sup>**

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**Introduction:** Diabetes mellitus is an endocrine disorder which involves multiple organ systems and leads to significant morbidity and mortality. Diabetes mellitus has been defined as "A metabolic syndrome characterized by chronic hyperglycemia and disturbance of carbohydrate, fat and protein metabolism associated with absolute or relative deficiency in insulin secretion and or insulin action". Thyroid diseases are also a common endocrinopathy seen in the adult population. Thyroid hormones are intimately involved in cellular metabolism. The present work is a modest attempt to study the prevalence of thyroid disorders in patients with type 2 diabetes mellitus.

**Material and method:** The study was carried out in total 108 diabetic patients without known thyroid disorder admitted in various Medical wards of R.N.T. Medical college and attached group of hospitals, Udaipur. It was a cross Sectional study done over a period of 10 months.

**Results:** In the present study, 13% of patients with type 2 diabetes mellitus had abnormal thyroid profile. Out of which the most common presentation was sub clinical hypothyroidism found in 9.25% followed by 1.9% had overt hypothyroidism and 1.9% had sub clinical hyperthyroidism. In persons with abnormal thyroid profile 85.7% were females and 14.3% were males which was statistically significant.

**Conclusion:** Prevalence of thyroid dysfunction is common among T2DM patients and is higher in females than in males. There is no significant correlation between thyroid dysfunction and age, diabetes control, family history, type of treatment and HbA1c level in diabetic patients.

**Keywords:** Diabetes Mellitus, Thyroid dysfunction, endocrinopathy, hypothyroidism, hyperthyroidism.

## OP 8

## C3 COMPLEMENT LEVEL IN CLINICAL MALARIA

**Dr Randheer Singh Bera***Department of Medicine, RNT Medical College, Udaipur, Rajasthan*

**Background:** Malaria is the most important of the parasitic disease of humans, with transmission in 106 countries containing three billion people and causing one million deaths each year. In particular several components of the classical complement pathway have been found to decrease during acute malarial infection. Recently some evidence of C3 complement have emerged as markers for hypocomplementaemia state in malaria infection in addition to chemokines and cytokines.

**Methods:** The present study included 100 untreated falciparum malaria patients attending Department of Medicine at M.B.G.H, Udaipur (Raj.), with symptoms of fever, rigor, and vomiting who tested positive for falciparum malaria by slide microscopy and/or MP QBC test was enrolled in this study. Venous blood sampling from eligible candidates was taken and their hs-CRP and serum complement C3 level was analyzed with the help of immunoturbidimetric assay.

**Results:** Mean age of patients was 54.35 years, while male to female ratio for uncomplicated, complicated and healthy controls were 2.1:1, 1.2:1 and 1.5:1 respectively. Results showed significantly low level of C3 complement in patients who had complications and also in patients who died, compared to uncomplicated patients and patients who discharged. [P value<0.001(HS)]

**Conclusions:** In this prospective case control study, we found that C3 complement levels at presentation correlate significantly with morbidity and mortality in falciparum malaria. Thus C3 complement can be considered a new, cost-effective, and reliable tool in assessment of prognosis in falciparum malaria.

## OP 9

## CAROTID DOPPLER STUDY IN PATIENTS WITH HYPERTENSION

Dr. Yash Desai, Dr. Abhijit Basu

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**Introduction:** Atherosclerosis typically occurs over a period of many years, usually many decades. After a generally prolonged "silent" period, atherosclerosis may become clinically manifest. Evaluation of intimal-medial thickness is considered as surrogate marker of Atherosclerosis. B-mode ultrasound was found to be a suitable noninvasive method to visualize the arterial walls and to monitor the early stages of the atherosclerotic process. Purpose of this study was to find out carotid intimal media thickness in patients with Hypertension and correlation of Carotid intimal medial Thickness (CINT) in the study group and to know the incidence and predilection for atherosclerosis.

**Methods:** This is an observational study carried out in Geetanjali Hospital. A total of 30 patients will be selected who are a followup case or a newly diagnosed case of Hypertension. After taking consent, patients were subjected for Carotid Doppler Examination and the relevant investigations pertaining to their clinical status.

**Results:** Mean age of the patients in this study sample is 46.02. Males formed the predominant group in our study samples, that is 69 (57.5%). Maximum number of patients, that is 52, were found to be in range of BMI 25.0-29.9. Mean CINT is elevated with patients of hypertension (1.20).

**Conclusion:** In our study, hypertension emerged as a single major risk group for atherosclerosis as evaluated. By using non invasive USG guided measurement of CINT, it is possible to detect atherosclerosis in hypertensive patients at the earliest during asymptomatic period and to prevent related complications.

## OP 10.

## PRESENTATION OF SCRUB TYPHUS IN MEWAR REGION in 2019

Dr. Aditya Vyas, Dr Gaurav Sharma

*Department of General Medicine, GMCH, Udaipur, Rajasthan*

**Aims & objectives:** To describe the clinical features, lab manifestations and complications inpatients diagnosed with scrub typhus presenting with acute febrile illness in intensive care unit (ICU) at a tertiary health care centre.

**Material and method's:** All adult patient's admitted in ICU with presentation of acute onset febrile illness in 2019 were evaluated. Scrub typhus was confirmed by Elisa for IgM antibody against *O. tsutsugamushi*. The clinical presentation, laboratory findings and complications were noted.

**Results:** 50 patients were included in study. 30 (60%) were positive for serology against *Orientia tsutsugamushi*. The clinical features ranged from high grade fever with chills (100%), breathlessness (80%), jaundice (58%), Hepato-splenomegaly (42%), cervical lymphadenopathy (40%), altered sensorium (8%) and ataxia (4%).

The pathognomic sign, eschar, was not seen in any patient, nor any rashes. Laboratory investigations revealed normal to low WBC, low serum albumin and elevated liver enzymes in all patients. 40% patients had deranged renal function tests. CSF examination in patients with CNS symptoms revealed lymphocytic pleocytosis, normal sugar level, mildly elevated protein and raised ADA levels. The complications included thrombocytopenia, ARDS, ARF and encephalitis. 4 patients died during their course of illness.

**Conclusion:** Scrub typhus is an important aetiological agent of acute febrile illness in tropical regions especially in hilly and tribal areas; other aetiologies including (dengue, malaria, enteric fever, leptospirosis and meningitis). All the patients presenting with acute febrile illness should be screened at primary health care facilities for scrub typhus and managed at the earliest.



## OP 11

**PREVALENCE OF LOW DIETARY CALCIUM INTAKE IN PATIENTS WITH EPILEPSY****Dr Ashish Bansal, Dr Lalit Shrimali***Department of General Medicine, GMCH, Udaipur (Raj)*

**Background:** The effects of antiepileptic drugs (AED) on bone health are well documented. Inadequate dietary intake of calcium and vitamin D plays a vital role and further compromises the bone health.

**Aims:** To assess the dietary pattern with special reference to calcium and related minerals in people with epilepsy (PWE) on AED.

**Methodology:** The dietary assessment in PWE was documented by dietary recall method. Patients were categorized according to age: group I: <14 years; group II: between 15-20 years; group III: between 21-45 years; group IV: >46 years. From the raw weights, total energy, dietary calcium, dietary phosphorous intake and phytate calcium ratio was calculated using a food composition table by Indian Council of Medical Research (ICMR) and analyzed statistically.

**Results:** A total of 362 patients with mean age of 29 + 15 years were studied. There were 190 women. The mean duration of AED treatment was 4 + 3 yrs, 64% on monotherapy 64% and 36% on polytherapy. The mean dietary intake of the total cohort was 2,007 + 211 Kcal/day, carbohydrate 335 + 33 gm/day; protein 31 + 7 gm/day; fat 18+2 gm/day; calcium 294 + 40 mg/day; phosphorus 557 + 102; phytates 179 + 30 mg/day; and phytate/calcium ratio 0.56+0.2. Milk and milk products were consumed by 42% of the total cohort. The daily dietary calcium (301 + 40 mg/day) intake of men was significantly higher than women (287 + 39 mg/day) ( $P < 0.001$ ). This was more evident in group II ( $P < 0.01$ ) and group III ( $P < 0.03$ ). There was a positive correlation between dietary calcium and dietary phytates ( $P < 0.001$ ), dietary proteins ( $P < 0.001$ ), dietary fat ( $P < 0.001$ ), and total energy ( $P < 0.001$ ).

**Conclusion:** The dietary consumption of calcium of all the patients was far below the recommended daily dietary allowance (RDA) by Indian Council of Medical Research (ICMR). Low dietary calcium could have a confounding effect on PWE on AED in all age groups. There is a need to formulate consensus guidelines to supplement dietary calcium to PWE.

## OP 12

**PREDICTION OF THE RISK OF MORTALITY IN PAEDIATRIC INTENSIVE CARE UNIT USING PRISM III SCORE****Dr Deep Shah, Dr Devendra Sareen, Dr Dileep Goyal, Dr Aashay Shah***Department of Paediatrics, Geetanjali Medical College and Hospital, Udaipur, Rajasthan*

**Background:** Pediatric risk of mortality (PRISM) score which has been devised by Pollock et al, to predict the mortality in hospitalized children. PRISM score is a revised form of physiologic stability index of mortality score.

**Methods:** An observational prospective study was conducted at tertiary care hospital, Udaipur Rajasthan over period of March 2017 to September 2018. Total 207 patients were enrolled in study as per inclusion and exclusion criteria.

**Results:** Total 29.92% had PRISM III score of 0 to 5, 25.45% had score of 6-10, 16.53% had score of 11-15, 13.12% had score of 16-20, 7.61% between 21 to 25, 4.72% between 26-30 and 2.62% had score of greater than 30. There was no mortality when the PRISM score of the child was between 0 to 5. The percentage of deaths increased progressively with increasing PRISM score.

**Conclusions:** There was no significance difference in predicted from PRISM score and the actual death. The expected mortality was comparable to actual death, except in children who required mechanical ventilation and vasopressor drugs.

**Keywords:** Disease, Pediatric intensive care unit, Pediatric risk of mortality score

## OP 13

## CLINICAL PROFILE OF ACUTE KIDNEY INJURY IN INTENSIVE CARE UNIT IN TERTIARY CARE CENTRE

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*<sup>1</sup>Resident, <sup>2</sup>Senior Professor Department of General Medicine, JLN Medical College, Ajmer, Rajasthan*

**Introduction:** Acute Kidney Injury is a common medical problem in ICU. Delay in diagnosis is associated with increased mortality. Variety of conditions can lead to AKI. Many factors can influence the outcome of AKI. This study was done to find the predictive factors related to outcome of AKI. This study was done to analyze the common causes and clinical manifestation of Acute Kidney Injury in I.C.U. patients.

**Methodology:** A total number of 50 cases of acute kidney injury in ICU of tertiary care centre, who met the inclusion criteria were studied. All these patients included, were studied with a detailed history, general physical examination, systemic examination and investigations whose blood urea & serum creatinine [ $>2$ ] increases above normal.

**Results:** This study showed Male to Female ratio of 1.27 : 1. Maximum incidence was seen  $>65$  year age group. Mortality was high in 45-64 (12.5%) age group. The study showed various etiological factors associated with AKI like septicemia, AGE, CCF, and Surgical causes are like Renal stone, post operative period, stricture urethra, BPH. Common complications were Hyprkalemia, Pulmoary edema, Encephalopathy, Multi organ dysfunction and metabolic acidosis. However septicemia was the predominant cause of AKI in our study and Multi organ failure was commonest cause of death. Out of all cases 78% patients had medical causes, 18% patients had surgical & 4% had obstetrical causes of AKI.

**Conclusions:** In this study about 92% patients were survived. 76% of patients were treated conservatively and 24% patients underwent haemodialysis. We observed that early diagnosis and early intervention were probably responsible for good survival rate.

## OP 14.

**SEQUENTIAL ORGAN FAILURE ASSESSMENT (SOFA) SCORE AS PREDICTOR OF OUTCOME IN PATIENTS WITH SEVERE SEPSIS IN MEDICAL INTENSIVE CARE UNIT****Dr Taniya Upadhyaya<sup>1</sup>, Dr D.C Kumawat<sup>2</sup>***<sup>1</sup>Resident, <sup>2</sup>Professor Department of Medicine, GMCH, Udaipur*

**Background:** Evaluation of patient's status before admitting into ICU is essential for ensuring correct interventions and proper management of hospital resources. Critical care predictive scoring systems serve as a helpful tool at admission in predicting the course of the patient in the ICU. Though their main goal is prognostication of patient's status, they also help in the assessment of various interventions and quality of care. The present study was planned to assess the ability of SOFA scoring to predict mortality in the ICU setting at a tertiary care center

**Aims:** To calculate SOFA Score on admission, after 48 hours and Delta SOFA score and to correlate it with outcome and to evaluate its predictive value of mortality in severe sepsis patients.

**Methodology:** The present Prospective Cohort study comprises 100 patients, with severe sepsis, admitted in ICU unit of both sex with age more than 18 years with sepsis were included. Laboratory and clinical data was collected and the SOFA score was calculated on admission and at 48 h of presentation to Medical ICU. The delta SOFA ( $\Delta$ SOFA) was calculated as the difference between the SOFA score at 48 h and the score on the day of admission to the ICU. The different SOFA scores were compared to outcome of the patient in ICU with severe Sepsis.

**Results:** The Total SOFA score calculated on admission in non-survival group was  $5.96 \pm 2.6$  compared to survived group which was  $4.75 \pm 1.82$ . The SOFA score was then calculated 48 hours after admission. Mean SOFA score in non-survival group was  $8.90 \pm 2.66$  compared to survived group which was  $3.28 \pm 1.83$ . The mean Delta score in non-survival group was  $2.96 \pm 2.16$  which was significant in relation to mortality as compared to delta score in survival group which was  $-1.15 \pm 1.83$ .

**Conclusions:** SOFA score on admission has shown a strong correlation with the outcome, and can help triage patients. In this study, SOFA score after 48 hours of admission was a better predictor of mortality than the score at admission.

## OP 15

## STUDY OF PREVALENCE AND CLINICAL PROFILE OF NEPHROPATHY AND RETINOPATHY IN TYPE 2 DIABETES PATIENTS AT GMCH

**Dr. Yash Salilbhai Patel, Dr. D.C. Kumawat**

*Resident, Professor Department of General Medicine, GMCH, Udaipur, Rajasthan*

**Background:** Microvascular complications of Type 2 Diabetes Mellitus (T2DM), (retinopathy and nephropathy) have a similar etiopathogenetic mechanism besides genetic predisposition. Even though these two complications frequently co-exist, their frequency varies. The association of these two significant complications and their co-existence needs a relook.

**Aims:** To study prevalence of retinopathy and nephropathy in Type 2 diabetes mellitus. Comparison of diabetic retinopathy and nephropathy in Type 2 diabetes mellitus. Correlation of diabetic retinopathy and nephropathy with duration of illness and various risk factors that affects development, progression and severity of diabetic retinopathy and nephropathy.

**Methodology:** 100 diabetic patients were taken up for study for a period of one year meeting the criteria for the present study. Detailed history was taken from patient and meticulous examination was done of all patients with special emphasis on renal and ophthalmic symptoms. Clinical data and investigation profile was tabulated. Statistical analysis was done.

**Results & Conclusion:** Among 100 patients in study, 32 patients had diabetic nephropathy, 23 were male and 9 were female. Among 100 patients, 22 had diabetic retinopathy, 15 were male and 7 were female. Among patients with diabetic retinopathy, 68.18% patients had positive family history of diabetic retinopathy. Among patients with diabetic nephropathy, mean FBS was 207 mg%, PPBS was 317.8 mg% and mean HbA<sub>1c</sub> was 9.2%. Among patients with diabetic retinopathy, mean FBS was 211 mg%, PPBS was 324.9 mg%, HbA<sub>1c</sub> was 9.5%. From this study it is found that diabetic nephropathy starts earlier than retinopathy. In this study hypertension was found to accelerate progression into nephropathy and retinopathy.



## OP 16

**TUBEROUS SCLEROSIS WITH ADPKD: A RARE CASE REPORT****Manasvin Sareen<sup>1</sup>, Mahesh Dave<sup>2</sup>, Shubham Kumar Sharma<sup>3</sup>*****Junior Resident<sup>1</sup>, Senior Professor<sup>2</sup>, Senior Resident<sup>3</sup> Department of General Medicine, RNT Medical College, Udaipur, Rajasthan***

Tuberous sclerosis (TS) is an autosomal dominant condition characterised by the presence of multiple hamartomas in various organ systems in the body. The kidneys are affected in 80% of patients, in the form of renal angiomyolipoma, renal cysts or renal cell carcinoma. Tuberous sclerosis and Polycystic kidney disease (PCKD) are two different genetic diseases. The association of the two is well recognized even though the incidence is rare. The association involves large deletion of both PKD-1 and TSC-2 genes on chromosome 16. This is also known as TSC-2/PKD-1 contiguous gene syndrome. We are reporting a case of 22-year-old male patient of TS presented with Epilepsy, mental retardation and pain abdomen. He had other classical features of TS with USG Abdomen revealing polycystic kidney which was consistent with the diagnosis of PCKD.

**Keywords:** Tuberous sclerosis, Polycystic kidney disease, Epilepsy, Mental Retardation

## OP 17

**A CLINICAL SPECTRUM OF SCALP DERMATOSES AT  
A TERTIARY CARE CENTRE IN SOUTHERN RAJASTHAN****Dr Arushi Jain<sup>1</sup>, Dr Kalpana Gupta<sup>2</sup>***<sup>1</sup>Resident, <sup>2</sup>Professor Department of Skin & VD, GMCH, Udaipur*

**Background:** Scalp is a region presenting with myriad form of dermatoses owing to its rich vascular, neural and appendageal density. The disorders may range from mild dermatitis to cutaneous metastasis. Scalp disorders presents with enormous psychological impact and physical morbidity. Morphological and histopathological variation of different scalp disorders need to be understood in a precise manner as these often share overlapping clinical manifestations. The pattern of scalp dermatoses may vary with regional, racial, environmental or other demographic factors such as age, gender and cultural practices. This study was aimed to evaluate the pattern and prevalence of various scalp dermatoses in Southern Rajasthan to reveal specific or non-specific association of various demographic and environmental factors.

**Aim:** To study the clinical pattern of skin disorders affecting the scalp among patients attending a tertiary care centre in Southern Rajasthan.

**Methodology:** Across sectional study was carried out on patients presenting with scalp dermatoses (50) at tertiary care centre over a period of 6 months. A detailed history, relevant systemic and dermatological examination was performed using haematological, dermoscopy, bed side tests, and histopathological evaluation.

**Results and conclusion:** Out of the 50 patients with scalp dermatoses females (54%) were more affected than males (46%) with a female to male ratio=1.17:1. The most common dermatosis was seborrhoeic dermatitis (36%), followed by psoriasis(20%), pediculosis (0.08%), pityriasis amiantiaacea (0.06%), and pyogenic granuloma(0.02%). Parietal area was found to be the most involved (76%) area.

O P 18

## A COMPARATIVE STUDY OF TOTAL LIPID PROFILE IN HYPERTENSIVE AND NON-HYPERTENSIVE PATIENTS AT SMS HOSPITAL, JAIPUR

Ashok Kumar<sup>1</sup>, Kailash Chand Kumawat<sup>2</sup>, Pratibha Chauhan<sup>3</sup>

*1-2Resident, 3 Senior Professor Department of Biochemistry, SMS Medical College, Jaipur*

**Introduction-** Cardiovascular diseases are the highest cause of death in world; hypertension is the most common cardiovascular disease which is the leading cause of morbidity and mortality in world. An altered lipid profile level can be a contributing factor in HTN. So in this study we assessed triglyceride and cholesterol in hypertensive and non-hypertensive patients

**Aim and objective** – To compare the lipid profile in hypertensive and non-hypertensive patients.

**Method** – A comparative cross sectional study was conducted at SMS Hospital, Jaipur. 120 patients and similar number of controls included in this study. Patients and controls were selected after inclusion and exclusion criteria

**Result:** The mean value of total cholesterol in study group and control was  $186.3 \pm 44.24$  mg/dl and  $148.8 \pm 39.97$  mg/dl, respectively. Cases had highly significant levels of serum cholesterol ( $p < 0.0001$ ). The mean value of triglycerides in study group and control group was  $141.3 \pm 80.6$  mg/dl and  $108.7 \pm 35.42$  mg/dl, respectively. Cases had highly significant levels of serum TG ( $p = 0.0103$ ). While we did not found any difference in levels of HDL, LDL, VLDL in cases and controls.

**Conclusion-** Based on the result obtained from study, it could be envisaged that serum cholesterol, triglyceride levels are positively correlated with hypertensive patients. So monitoring and regulating these parameters can give additional benefit in controlling HT.

**Keywords:** Hypertension, cholesterol, triglyceride

## OP 19

## ASSOCIATION OF SERUM URIC ACID LEVEL AND ESTIMATED GLOMERULAR FILTRATION RATE IN CHRONIC KIDNEY DISEASE PATIENTS

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1Ph.D. Scholar, 2Professor, 3Professor and Head, Department of Biochemistry,  
Mahatma Gandhi Medical College & Hospital, Jaipur

4Professor and Head Department of Nephrology, Mahatma Gandhi  
Medical College & Hospital, Jaipur

**Introduction:** Uric acid is widely recognized as an independent risk marker of cardiovascular disease. In recent years, it has been suggested as a contributory risk factor for progression of chronic kidney disease (CKD). Hyperuricemia can induce glomerular hypertension due to development of arteriosclerosis, glomerular injury and tubular fibrosis.

**Aims:** This case control study was planned to assess the correlation of serum Uric Acid with Estimated Glomerular Filtration Rate (eGFR) in CKD patients.

**Methodology:** In the study fifty diagnosed patients of CKD (stage 4 and 5), age between 20 to 60 years were enrolled. Fifty age and sex matched healthy subjects constituted the control group. Serum Urea, Creatinine and uric acid were estimated for all the enrolled subjects. eGFR was calculated by Cockcroft and Gault formula. Results were compared between CKD patients and control group by applying suitable statistical test.

**Result:** Mean eGFR was significantly lower in CKD group ( $10.28 \pm 4.18$  ml/min/1.73m<sup>2</sup>,  $p < 0.0001$ ) as compared to healthy subjects. Mean serum uric acid was significantly higher in CKD patients ( $8.02 \pm 1.84$  mg/dl,  $p < 0.0001$ ) as compared to healthy subjects. A significant negative correlation was observed between Serum uric acid and eGFR on applying Spearman's correlation ( $r = -0.463$ ,  $p < 0.0001$ ).

**Conclusion:** High level of serum uric acid was found to be associated with significant fall in eGFR. Finding of the study suggests a strong association of hyperuricemia with progression of CKD. Therefore, uric acid can be considered as an independent risk factor for development of end stage renal disease (ESRD).

## OP 20

**A STUDY OF SERUM C-PEPTIDE LEVEL IN OBESE AND NON OBESE TYPE 2 DIABETES MELLITUS PATIENTS AT SMS HOSPITAL, JAIPUR****Kailash Chand Kumawat<sup>1</sup> Ashok Kumar<sup>2</sup> Rati Mathur<sup>3</sup>**

*1-2 Resident, 3 Senior Professor Department of Biochemistry,  
SMS Medical College, Jaipur*

**Introduction:** According to WHO August 2011, 346 million people worldwide have diabetes. Type 2 DM is well associated with insulin resistance. Human insulin and C-Peptide are synthesized as a single polypeptide chain. The measurement of C-peptide, thus provides a better index of endogenous insulin production and pancreatic beta cell function than insulin measurements. So in this study we are studying C- Peptide level in type 2 DM patients.

**Aim-**To assess serum C-Peptide level in obese and non obese Type 2 DM patients.

**Methodology-** A cross sectional study was conducted at SMS Hospital Jaipur. Total 90 patients with type 2 DM age group (30-80 years) were included and divided into two groups. Group 1. 40 patients (BMI >30 obese) and Group 2 50 patients (BMI <30 non obese) according to WHO criteria. Type 1 diabetes, gestational diabetes and pancreatic disorders were excluded. Samples were analysed for the measurement of serum glucose by Colorimetric method and C-Peptide by chemiluminescence assay method. HbA1c measured by latex turbidimetric method

**Results-** Mean C peptide levels was highly significant in obese  $16.53 \pm 8.48$  ng/ml than non-obese patients  $6.82 \pm 3.15$  ng/ml (p value <0.05). The increased levels of C-peptide along with increased FBS in obese patients indicate insulin resistance.

**Conclusion-** As majority of patients with elevated FBS and fasting C-Peptide were obese, our study infers that obese are more insulin resistant than non-obese. Since C-Peptide levels assess the endogenous insulin reserve, it will also be helpful to alter the treatment modality based on it.

**Keywords** – C-PEPTIDE, DM



## OP 21

SPECTRUM OF FINE NEEDLE ASPIRATION CYTOLOGY OF  
INTRA ABDOMINAL LESIONSDr. Deepika Hemrajani<sup>1</sup>, Dr. Palak Upadhyay<sup>2</sup>*1Associate Professor, 2Resident Department of Pathology, SMS Medical College, Jaipur (Raj)*

**Background:** Abdomen has a wide spectrum of lesions, ranging from benign, inflammatory to malignant, palpable or non-palpable, diagnostic evaluation of which is necessary for treatment.

**Aims:** To assess the importance of FNAC in diagnosis of intra-abdominal lesions and to study the spectrum of these lesions in terms of age, sex, cytological features and their categorization into benign, inflammatory, malignant or unsatisfactory. Also, to further classify malignant lesions according to their characteristic cell types.

**Materials and methods:** The study included 1220 lesions over a time period of 11 months (January 2019- November 2019) detected clinically or radiologically. USG was used for all non-palpable lesions and certain palpable lesions. Giemsa and Haematoxylin Eosin were used for staining.

**Results:** Mean age range was 40-60 years with a female preponderance (M: F: 1:1.32). Most common sites were liver followed by gall bladder. Metastatic neoplasms and adenocarcinomas were two most common malignant lesions. There were 681 (55.81%) malignant, 183 (15%) benign, 76(6.23%) inflammatory, 280(22.96%) were unsatisfactory for evaluation.

**Conclusion:** Diagnosis of abdominal lesions whether benign or malignant requires a proper set up (be it trucut biopsy or diagnostic laparotomy) which is not possible in all cases considering the huge number of patients presenting with abdominal lesions. Guided FNAC has emerged as a good alternative that is both cost effective and feasible. It is used not only for pre-operative diagnosis but also in certain cases of advanced malignancy like in gall bladder malignancies patient can directly be subjected to chemo / radiotherapy.

## OP 22

**CLINICOPATHOLOGICAL EVALUATION OF USG GUIDED  
FNAC OF HEPATIC MASS LESIONS****Dr. Pallak Gupta***Resident, Department of Pathology, GMCH, Udaipur, Rajasthan*

**Background:** Liver is the most common site for metastatic malignancy. It can also be involved by primary benign or malignant neoplasms. USG guided FNAC is very helpful in the evaluation of hepatic mass lesion. Radiology does not always give exact characterization of the lesions, therefore a cytological diagnosis is often required to guide subsequent management. Use of minimally invasive techniques under radiological guidance with pathological correlation is gaining popularity as a means of diagnosing hepatic lesions. In the literature, the sensitivity of FNA of liver neoplasms ranges from 92 to 96%.

**AIM:** To assess the correlation of clinical diagnosis of hepatic mass lesions on USG guided FNAC with its pathological spectrum.

**METHOD:** An observational study was done on 45 patients where USG Guided FNAC for suspected hepatic mass lesions were done. Cytology smears were prepared and studied. Clinical, radiological and histopathological findings wherever available were correlated.

**RESULT:** The present study provides information about the utility of USG guided FNAC in pathological assessment of hepatic mass lesions.

**CONCLUSION:** USG guided yields an accurate diagnosis in most cases, and is therefore a useful tool for diagnosis and guiding further management of hepatic mass lesions.

## OP 23

**DENGUE AND CHIKUNGUNYA, MALARIA, SCRUB TYPHUS CO-INFECTION IN PATIENTS PRESENTING WITH FEBRILE ILLNESS ATTENDING TERTIARY CARE HOSPITAL, JAIPUR (RAJ.)****Dr Anupriya Yadav<sup>1</sup>, Dr. Rameshwari Bithu<sup>2</sup>*****1Resident, 2 Senior Professor Department of Microbiology, S.M.S Medical College, Jaipur***

**Introduction:** Concurrent infection with two or more agents can result in an illness having overlapping symptoms creating a diagnostic dilemma for the treating physician. Acute febrile illness (AFI) is a common clinical syndrome among patients seeking hospital care in India. In recent years the spread of vector borne disease has gained concern worldwide, especially in tropical and subtropical regions because of their recurring outbreaks.

**Aims:** To identify the coinfection cases.

**Methodology:** This study is a retrospective analysis of various coinfection with Dengue diagnosed between Jan 2019 to Nov 2019. Dengue specific IgM antibodies were detected by Dengue IgM antibody Capture ELISA (SD), Chikungunya by ELISA, Malaria by peripheral blood smear(PBF) and Scrub Typhus by IgM ELISA (InBios).

**Results:** From January 2019 to November 2019, 7580 patients who are tested for both dengue and scrub typhus, 165 patients were found positive. 93 cases found positive for both dengue and chikungunya and 1 case positive for dengue and malaria.

**Conclusion:** Co-infection may be an under recognized combination of concurrent infections. High degree of suspicion for coinfection has to be made in patients presenting with febrile illness in tropics in post monsoon season with multisystem involvement, deranged laboratory parameters and not responding to therapy so as to reduce morbidity, mortality, length of hospital stay and cost of therapy.

## OP 24

**BACTERIAL PROFILE AND ANTIBIOGRAM OF BURN WOUND INFECTIONS IN A TERTIARY CARE CENTRE**

**Dr Ganpat Lal Kumawat<sup>1</sup>, Dr Rohitash Sharma<sup>2</sup>,  
Dr Priyanka S. Gupta<sup>3</sup>, Dr Vijaylatha Rastogi<sup>4</sup>**

*1Resident, 2 Assistant Professor, 3Senior Demonstrator, 4 Professor Department of Microbiology, J.L.N. Medical College, Ajmer, Rajasthan, India*

**Background:** Burn patients are at high risk for infections related morbidity and mortality. It is essential for a burn institute to determine its specific pattern of time-related changes in microbial flora and antimicrobial profile.

**Aims:** To find out the bacterial profile of burn wound infection and the antimicrobial pattern of isolated organism.

**Materials and Methods:** This study was conducted in department of microbiology, J.L.N. Medical college, Ajmer, Rajasthan, from Jan. 2019 to Sept. 2019. The wound swabs were collected from 102 patients. The samples were processed as per standard protocol. Pathogens were isolated, identified by biochemical tests and antibiotic susceptibility testing was performed by Kirby-Bauer disc diffusion method.

**Results:** Out of 102 samples, 99(97.1%) were culture positive and 3(2.9%) were sterile. Most common isolated was *Pseudomonas* species (34.3%) followed by CoNS species (25.2%), *Klebsiella* species (19.2%), *Staphylococcus aureus* (14.1%), *Enterobacter* species (7.1%), *Enterococcus* species (7.1%), *Escherichia coli* (5.1%), *Streptococcus* species (3%), *Proteus* species (1%). Gram positive cocci were most susceptible to Linezolid (95.9%) and Gram negative organisms were most susceptible to Aztreonam (38.8%).

**Conclusion:** Continuous monitoring and careful lab testing prior to antibiotic use can reduce drug resistant. Judicious use of antibiotics can help in proper treatment and prevention of emergence of multidrug resistant pathogens like MRSA and ESBL producers.

## OP 25

**THE ROLE OF GeneXpert (CBNAAT) IN EARLY DETECTION OF MYCOBACTERIUM TUBERCULOSIS: A CLINICAL STUDY****<sup>1</sup>Hemant Singh, <sup>2</sup>Mahima***<sup>1,2</sup>Senior Medical Officer, Govt. Sub District Hospital Didwana (Nagaur)*

**Background:** Tuberculosis is the one of the leading cause of death in developing countries. Traditional methods take several weeks to produce results causing delayed onset of treatment so WHO recommended use of Cartridge Based Nucleic Acid Treatment (CBNAAT) for early diagnosis.

**Aims and objectives:** To find out the role of CBNAAT in early diagnosis of TB. To determine sensitivity/ resistance to Rifampicin

**Material and methods:** A retrospective study from January 2019 to October 2019 was conducted at Govt. Hospital Didwana. Sputum and other samples suggestive of pulmonary and extra pulmonary TB were processed as per standard GeneXpert guidelines.

**Results:** Out of 1279 samples, 623 (48.71%) samples were MTB negative. 570 (44.57%) MTB positive samples were Rifampicin sensitive and 36 (2.81%) MTB positive samples were found to be Rifampicin resistant. 11 (0.86%) samples showed Rifampicin indeterminate pattern. 8 (0.63%) samples showed invalid or no result. Out of 18 extra pulmonary tuberculosis samples, 2 samples detected MTB and rest 16 were MTB negative. These MTB positive samples were found to be Rifampicin sensitive.

**Conclusion:** This study implies role of CBNAAT (GeneXpert) in early detection of MTB. Early diagnosis of disease can reduce morbidity and mortality of patients.



## OP 26

**PHENOTYPIC DETECTION OF EXTENDED SPECTRUM  $\beta$ -LACTAMASE, METALLO- $\beta$ -LACTAMASE, AmpC  $\beta$ -LACTAMASE AND THEIR CO-EXISTENCE IN CLINICAL ISOLATES OF KLEBSIELLA PNEUMONIAE SUBSPECIES PNEUMONIAE AT A TERTIARY CARE HOSPITAL IN JAIPUR.**

**Sonali Mittal<sup>1</sup>, Ved Prakash Mamoria<sup>2</sup>, Mohit Agrawal<sup>3</sup>**

*1Resident, 2Professor and Head, 3 Associate Professor Department of Microbiology, Mahatma Gandhi Medical College, Jaipur (Raj)*

**Background:** *Klebsiella pneumoniae* spp *pneumoniae* is notorious for causing a range of nosocomial and community-acquired infections like pneumonia, urinary tract infections, sepsis, meningitis and pyogenic liver abscess. It has gradually acquired resistance to a wide range of antibiotics, a major mechanism of drug resistance being expression of various  $\beta$ -lactamases.

**Aim:** The study was conducted to detect Extended spectrum  $\beta$ -lactamase (ESBL), Metallo- $\beta$ -lactamase (MBL), AmpC  $\beta$ -lactamase in *K. pneumoniae* spp *pneumoniae* by phenotypic methods and analysis of its antimicrobial susceptibility pattern.

**Methodology:** *K. pneumoniae* spp *pneumoniae* isolates were identified by Vitek®2 Compact™ from various clinical specimens and were subjected to screening tests for ESBL, MBL and AmpC production. Screen positive isolates were confirmed by CLSI phenotypic confirmatory method (double disk potentiation method) for ESBL, combined disk test for MBL and cefoxitin-cloxacillin double disk synergy test for AmpC production. Antimicrobial susceptibility testing was performed by Kirby Bauer disk diffusion method.

**Results:** Out of total 291 non-repetitive isolates of *K. pneumoniae* spp *pneumoniae*, 40.21% (117) were ESBL producers, 23.37% (68) were MBL producers and 3.44% (10) were AmpC producers. 9 isolates produced ESBL+AmpC together and 5 isolates showed co-existence of ESBL+MBL. ESBL producing isolates were most sensitive to carbapenems like imipenem (75.21%) and ertapenem (42.73%). MBL producing isolates were most sensitive to tigecycline (47.06%). AmpC producers were most sensitive to carbapenems (80%) and tigecycline (70%).

**Conclusion:** The study reveals that *K. pneumoniae* spp *pneumoniae* is resistant to antibiotics commonly used to treat infections. This is a worrying situation and warrants a consistent surveillance of antimicrobial resistance and implementation of an efficient infection control programme.

## OP 27

**A STUDY OF GRAM POSITIVE BACTERIAL ISOLATES AND THEIR  
ANTIBIOTIC SUSCEPTIBILITY PATTERN OF VARIOUS PUS  
SAMPLES RECEIVED IN DEPARTMENT OF MICROBIOLOGY  
J.L.N.MEDICAL COLLEGE, AJMER**

**Dr.Sushila Saini 1, Dr.Priyanka Soni Gupta<sup>2</sup>, Dr. Geeta Parihar<sup>3</sup>,  
Dr.Vijaylatha Rastogi<sup>4</sup>**

*1Resident, 2Assistant Professor, 3Senior Professor, 4Professor &  
Head Department of Microbiology, JLN MC, Ajmer (Raj)*

**Background:** Gram- positive bacteria, accounts to be major causative factor of severe sepsis or septic shock cases. These infections are difficult to treat because of increasing antibiotic resistance in the pathogens.

**Aim:** To screen various gram positive bacterial isolates in the pus samples and determine their antibiotic sensitivity and resistance pattern against standard antibiotics.

**Materials and Methods:** It was a observational prospective study .476 Pus samples recieved from different departments of JLN medical college & associated group of hospitals, Ajmer from Dec.2018 to April 2019 and were processed in the laboratory using standard microbiological procedures. Identification of isolates by using gram staining and biochemical tests .The antibiotic sensitivity testing of isolates was performed by Kirby- Bauer disc diffusion method on Muller Hinton agar and interpreted as per CLSI guidelines.

**Results:** Out of 476 samples gram positive cocci were present in 148 samples with M:F(2.2: 1).Out of 148 samples CONS 59( 40%) ,Staphylococcus aureus 46(39%),Enterococcus in 27 (18%) & Streptococcus pyogenes in 16 (11%) .Out of 46 cases of Staph aureus, 18( 39%) were MRSA. Vancomycin and Linezolid sensitivity 100% and 98% in CONS,100 % and 100% in Staph aureus and 78% and 93% in Enterococci respectively.

**Conclusion:** This study will guide the clinician in choosing appropriate antibiotics for better treatment and preventing emergence of antibiotic resistance.

OP 28

**SEASONAL VARIATIONS OF INFLUENZA A (H1N1) pdm09 & ITS CORRELATES IN PATIENTS ATTENDING SMS AND ATTACHED HOSPITALS**

**Dr Anurag Sirav<sup>1</sup>, Dr Bharti Malhotra<sup>2</sup>, Dr Parul Sinha<sup>3</sup>, Dr Dinesh Jain<sup>3</sup>, Dr Veena Sharma<sup>4</sup>, Dr Sandeep Gupta<sup>5</sup>, Dr Varunika Vijayvergiya<sup>5</sup>, Dr Surbhi Kavia<sup>5</sup>, Dr Lalita Verma<sup>5</sup>**

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**Background-** Influenza A(H1N1) pdm09 causes upper and lower respiratory tract infections in the host it infects, resulting in symptoms such as nasal secretions, chills, fever, decreased appetite, and possibly lower respiratory tract disease. In cases with co morbid conditions the morbidity and mortality is high. The trends keep changing due to antigenic shift and drift and reassortment of the virus.

**Aims-** The purpose of this research was to study the seasonal Variations and demographic profile in patients found to be positive for Influenza A (H1N1) pdm09 among the total suspects with influenza like illness.

**Methodology-** A retrospective study was carried out in Advance Basic Sciences & Clinical Research Lab, Department of Microbiology in SMS Medical College & Hospital, Jaipur for diagnosis of Influenza A (H1N1) pdm09 cases using RT-PCR technique over 1 year period (June 2018 to May 2019) and demographic data was noted (age, sex etc.).

**Results-** Total of 18504 samples were tested out of which 2191 (11.84%) were positive for Influenza A (H1N1) pdm09. Majority of the positive cases were found in the month of January (36.92%), February (39.98%) and March (13.87%). Positivity was higher in urban population (67.32%) than rural population (31.68%). Most of these cases were from young adults (36.45%) in age group between 15 to 30 years.

**Conclusion-** Demographic parameters and seasonal variations of Influenza A (H1N1) pdm09 gives ideas to create the awareness and to improve the control strategies to minimize the morbidity and mortality and spread of disease.

## OP 29

**BACTERIOLOGICAL PROFILE AND ANTIBIOGRAM OF ISOLATES FROM RESPIRATORY SAMPLES OF ADULT PATIENTS ADMITTED TO INTENSIVE CARE UNIT AT J.L.N. HOSPITAL, AJMER – A 1 YEAR STUDY.****Dr Manisha Charan<sup>1</sup>, Dr. Neha Agarwal<sup>2</sup>, Dr Vijaylatha Rastogi<sup>3</sup>***Resident, Senior Demonstrator, Professor Department of Microbiology, J. L. N. Medical College, Ajmer, Rajasthan*

**Background:** Respiratory infections are associated with significant increase in morbidity and mortality in critically ill patients admitted to ICU. Prevalence of multi drug resistant (MDR) isolates is alarmingly high in such patients which is further compounded by intubation and mechanical ventilation, again a risk factor.

**Aim:** To study bacteriological profile and antibiotic susceptibility pattern of respiratory infections among patients admitted to ICU along with their clinical correlation.

**Methodology:** This retrospective study was carried out at ICU of J.L.N. Hospital, Ajmer for a period of November 2018 to October 2019. A total of 106 samples were collected from patients with respiratory infections and processed for culture & antibiotic susceptibility testing as per CLSI guidelines.

**Results:** Among 106 clinical samples tested, 61 were culture positive (57%). Gram negative isolates (84%) were predominant followed by gram positive isolates (16%). Most prevalent pathogens were *E. coli* (28%), *Klebsiella* spp. (20%). Among culture positive isolates 78.68% were multidrug resistant (MDR). 13% gram negative isolates were MBL producers. Out of 58 patients admitted to MICU most common clinical presentation was chronic obstructive pulmonary disease (30%) followed by bilateral pneumonitis (26%). The attributable mortality, in this study, is about 14%.

**Conclusion:** None of the isolates were found to be resistant to vancomycin in gram positive organisms. Most of the gram negative isolates were sensitive to meropenem, piperacillin + tazobactam. This study identifies correlation between presence of MDR isolates in morbid patients.

## OP 30

**LOWER RESPIRATORY TRACT INFECTIONS (LRTI );  
BACTERIOLOGICAL SPECTRUM AND ANTIBIOGRAM****Dr Pankaj Agrawal, Dr Ghanshyam Soni***Department Of Microbiology, Government Medical College, Kota, (Rajasthan)*

**Background:** Lower respiratory tract infection (LRTI) is one of the common major health problems in India causing morbidity and mortality.

**Aim & Objectives:** To identify common pathogens responsible for LRTI and to study their antibiogram in Government Medical College, Kota and associated hospitals (Rajasthan).

**Methodology:** The study was conducted in September and October 2019. Among total 120 respiratory samples collected, were sputum (111), pleural fluid (8) and tracheal aspirate (1) in sterile clean container. Standard protocol was followed to isolate and identify organisms which was followed by Kirby-Bauer disk diffusion method. Results were interpreted as per latest CLSI guidelines.

**Results:** Among 120 patient samples , 40 (33.33%) samples showed pure growth. bacterial isolates were *Pseudomonas aeruginosa* 12 (30%), *Klebsiella pneumoniae* 8 (20%), *Escherichia coli* 5 (12.5%), *Acinetobacter Baumannii* 3 (7.5%), *Staphylococcus aureus* 1 (2.5%).

**Conclusion:** This study emphasizes that knowledge of the diversity of pathogens responsible for LRTIs and their susceptibility patterns to antibiotics, as well as antibiotic resistance surveillance. These findings are important in the effective management of LRTI with prompt clinical and laboratory diagnosis along with appropriate treatment strategies.



## OP 31

**STUDY OF THE BASELINE WIDAL TITRE AMONG HEALTHY INDIVIDUALS IN HADOTI REGION OF RAJASTHAN,INDIA**

**Dr Seema sharma<sup>1</sup>, Dr Anita E. Chand<sup>2</sup>, Dr Ghanshyam Soni<sup>2</sup>,  
Dr Dinesh Verma<sup>4</sup>**

*1MD Resident, 2Sr. Professor, 3Associate Professor Department of Microbiology, GMC  
Kota, Rajasthan*

**Background:** The Widal titres among the healthy populations of different areas differ substantially and this depends upon the endemicity of typhoid in each area, which has been changing over time.

**Aim:** To determine the average baseline titre of the apparently healthy population in Hadoti region of Rajasthan, India.

**Materials and Methods:** Non-repetitive blood samples were collected from healthy blood donors (n= 150) of the age group of 20-50 years, of both sexes, who attended blood bank of New medical college and hospital Kota from August 2019 to Nov 2019. 0.5 ml of the 2 fold serially diluted sera (dilutions from 1:20 to 1:320) in 0.9% normal saline were tested by adding an equal amount of antigen and the tubes were then incubated overnight at 37°C in a water bath.

**Results:** Among the 150 serum specimens which were tested, 87 (58%) sera were found to be positive for the Widal test and 63 were negative. The baseline titre for TO and TH was noted to be 1:40 and that for AH and BH was noted to be 1:20.

**Conclusion:** Based on the above results of our study, it has been recommended that the cut-off titre of 1:80 for both anti-O antibodies and anti-H antibodies of Salmonella Typhi and 1:40 for anti-H antibodies of Salmonella Paratyphi A and B may be considered as diagnostic for enteric fever in Hadoti region of Rajasthan.

## OP 32

**PREVALENCE OF ASPERGILLUS IN VARIOUS CLINICAL SAMPLES  
IN A TERTIARY CARE HOSPITAL, JAIPUR****Dr. Shailja Agrawal<sup>1</sup>, Dr R K Mishra<sup>2</sup>, Dr Malvika Sharma<sup>3</sup>.**

*1Resident Doctor, 2Senior Professor, 3Senior Demonstrator Department of Microbiology,  
SMS Medical College, Jaipur, Rajasthan*

**Background-** Aspergillus is ubiquitous genus of moulds. The term "Aspergillosis" used to describe disease caused by Aspergillus, mainly Aspergillus fumigatus, which is a systemic infection in immunocompromised as well as immunocompetent individuals. It involves mainly pulmonary system but can also affect other body sites like Paranasal sinuses & cutaneous tissues.

**Aims-** To isolate & detect prevalence of various Aspergillus species in a tertiary care hospital, Jaipur.

**Methodology-** A retrospective study was conducted; which included 449 different clinical samples for the period of 6 months received in Mycology Section, Department of Microbiology, SMS Medical College, Jaipur.

Out of these 449 different samples, we isolated 96 Aspergillus species on KOH mount, which were further taken for fungal culture on Sabourauds Dextrose Agar (SDA). Speciation of these Aspergillus isolates was done by Lactose Phenol Cotton Blue (LCB) & Slide culture method.

**Results-** Aspergillus niger 37.5% (n= 36), Aspergillus fumigatus 29.1% (n=28), Aspergillus flavus 21.8% (n=21), Aspergillus nidulans 7.2% (n=7), Aspergillus terreus 4.16% (n=4)

**Conclusion-** This study concluded that Aspergillus niger was the predominant species followed by Aspergillus fumigatus, mainly in sputum followed by broncho alveolar lavage and also create awareness about infection caused by aspergillosis.

## OP 33

**CLINICO-MYCOLOGICAL PROFILE OF DERMATOPHYTES IN SKIN INFECTION AT TERTIARY CENTRE IN KOTA****Dr. Shikha Asawa<sup>1</sup>, Dr. Ghanshyam Soni<sup>2</sup>***<sup>1</sup>Resident, <sup>2</sup>Senior Professor Department of Microbiology, GMC Kota, Rajasthan*

**Background**– Dermatophytosis is common skin disease affecting million of people worldwide. Dermatophytes are keratinophilic fungi, which produce keratinases, that causes infection of skin and its appendages. They are also termed as "ring worm" or "tinea". Dermatophyte group contain Trichophyton, Microsporum and Epidermophyton.

**Aims** - To determine clinic-mycological profile of dermatophytes in skin infections at tertiary centre in Kota

**Methodology** - Clinically suspected 100 cases of dermatophytosis attending OPD of New Medical College Hospital, Kota during October 2018-September 2019 were studied. Direct microscopy was done with 10% KOH preparation. Culture was performed on SDA and SDA with chloramphenicol and cycloheximide (SCCA). LPCB mount was prepared from growth and seen under low (10X) and high (40X) magnification for species identification.

**Results** – Tinea corporis (48%) found to be commonest clinical presentation followed by Tinea cruris(26%). Out of 100 samples 61 (61%) were culture positive for dermatophytes in which Trichophyton rubrum 39 (63.93%) found to be commonest etiological agent followed by Trichophyton violaceum 11 (18.03%).

**Conclusion** – Among dermatophytic skin infections Tinea corporis was the predominant clinical presentation and Trichophyton rubrum was commonest dermatophyte isolated.

## OP 34

## BACTERIOLOGICAL PROFILE AND ANTIMICROBIAL SUSCEPTIBILITY PATTERN OF BURN WOUND INFECTIONS IN TERTIARY CARE HOSPITAL

**Dr Nitika Garg<sup>1</sup>, Dr Rekha Bachhiwal<sup>2</sup>, Dr Rajni Sharma<sup>3</sup>,  
Dr Nitya Vyas<sup>4</sup>**

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**Introduction:** Globally, burns are considered devastating forms of trauma in patients with serious thermal injury. Infection on burn wound is also an important factor in the prolongation of hospitalization and cause of mortality, morbidity as causative agents are generally multidrug resistant organisms.

**Objective:** The present study was undertaken to know microbial profile and antimicrobial susceptibility pattern of organisms isolated from burn wounds.

**Methods:** Bacterial isolates from 192 burn wound swabs were identified by standard microbiological methods. Antimicrobial susceptibility test was done by Kirby-Bauer disc diffusion method as per CLSI guideline.

**Results:** Out of 192 samples, 259 isolates were there. In which 74.91 % revealed single organism while 25.09 % were polymicrobial infections. The most common isolate was *Pseudomonas* spp accounting for 50.19% and other bacterial isolates were *Enterobacter* spp (27.79%), *Escherichia coli* (5.40%), *Citrobacter* spp (6.17%), *Proteus* spp (2.70%), *Klebsiella* spp (1.93%) and Gram positive cocci (5.40%). *Pseudomonas* spp showed maximum sensitivity to colistin and other Gram negative bacteria were maximum sensitive to polymyxin B and tigecycline. Gram positive cocci were maximum sensitive to vancomycin and linezolid.

**Conclusion:** Burn wound monitoring requires the study of changing pattern of bacterial flora and the antibiotic sensitivity reports. Repeated swab cultures and antibiograms are advised for proper selection of antibiotics and prevent over use and misuse of antibiotics. So, routine antibiotic surveillance is required.

## OP 35

## AN OBSERVATIONAL STUDY OF IMMUNOLOGICAL STATUS OF NEWLY DIAGNOSED HIV POSITIVE POPULATION AT ICTC SMS MEDICAL COLLEGE, JAIPUR (RAJASTHAN)

**Dr Preeti garg<sup>1</sup>, Dr Nitya Vyas<sup>2</sup>, Dr Babita Sharma<sup>3</sup>,  
Dr Shanoo Sharma<sup>4</sup>**

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Microbiology, SMS Medical College, Jaipur, Rajasthan*

**Background:** HIV /AIDS has become one of the major public health problem in India. HIV infection encompasses a spectrum of clinical feature ranging from an acute syndrome with primary infection via prolonged asymptomatic state to advanced disease. HIV infection leads to immune system collapse, following a gradual destruction of CD4+ T lymphocytes that causes a severe immune suppression. CD4 count is major laboratory indicator of immune function in HIV infected patients. CD4 count is a useful tool for the initiation and the follow up of the antiretroviral therapy response.

**Aims:** Study of the immunological status of newly diagnosed HIV positive population at ICTC SMS medical College, Jaipur (Rajasthan).

**Methodology:** The HIV status of patients was confirmed by three tests with different antigen or principle as per NACO guidelines and by initial CD4 T lymphocyte count was done by FACS Calibur BD bioscience

**Results:** Out of 844 HIV positive patients 438 (52%) subject met the immunological definition of AIDS at the time of HIV diagnosis (CD4 count <200 cells/micro litre). Majority of patients were diagnosed in age group 26-35 yrs (30.56%) followed by age group 36-45yrs (25.11%). Males outnumbered females in all groups.

**Conclusion:** The result of our study showed a delay in the diagnosis of HIV infected patients and confirm the need for intensifying prevention action, expansion and promotion of HIV testing in healthcare facilities and within voluntary counseling and testing centers.



## OP 36

**CLINICO-MYCOLOGICAL PROFILE OF ONYCHOMYCOSIS AT  
TERTIARY CENTRE, GOVT. MEDICAL COLLEGE, KOTA****Dr. Pankaj Agrawal<sup>1</sup>, Dr. Ghanshyam Soni<sup>2</sup>***1Resident, 2Senior Professor Department Of Microbiology, Government Medical College,  
Kota (Rajasthan)*

**Background** – Onychomycosis affects approximately 5% of the population worldwide but variable frequency depending on different climatic, professional and socioeconomic condition. It represents 50% of all onychopathies (nail disorder) and about 30% of cutaneous mycotic infection.

**Aim** - To determine clinic-mycological profile of Onychomycosis at tertiary centre, Govt. Medical College, Kota

**Methodology** – Nail or subungal scrapings from 50 patients of clinically diagnosed cases of finger nail or toe nail onychomycosis were collected from June 2019 to October 2019 with a surgical blade after cleaning the affected area with 70% ethanol. Microscopic examination of the samples was performed following clarification with 20% potassium hydroxide (KOH). All samples were inoculated on (1) Sabouraud dextrose agar (SDA) (2) SDA with 5% chloramphenicol and cycloheximide. Cultures were incubated at 25°C and 37°C and examined daily for first week and twice a week for 6 weeks. LPCB mount was prepared from growth and seen under low (10X) and high (40X) magnification. Different fungi were identified based on microscopic and culture characteristics as per standard techniques/procedures.

**Results** – The isolation rate of onychomycosis was found to be 20 (40%) from our hospital. Dermatophytes were isolated in 11 (55%) cases, non-dermatophytes in 6 (30%) cases and yeast in 3 (15 %) cases as fungal agents. Trichophyton mentagrophyte was the most common species isolated in 6 (30 %) cases of onychomycosis.

## OP 37

**ASSESSMENT OF MEASLES OUTBREAK, OCCURRING IN  
DIFFERENT DISTRICTS OF RAJASTHAN, INDIA****Dr Jairam Choudhary, Dr S K Singh, Dr Nitya Vyas***Department of Microbiology, SMS Medical College, Jaipur, Rajasthan*

**Background:** Measles is highly infectious and potentially fatal viral infection mainly affecting children, characterised by fever, respiratory symptoms followed by maculopapular rash. Measles is an endemic disease in India causing significant morbidity and mortality.

**Aims & objective:** Assessment of Measles outbreak during the months of January 2019 to December 2019 in Rajasthan and to describe one year data on the Measles and Rubella serology.

**Method:** A total of 171 patients of both sexes were studied. Serum separated and tested by euroimmun anti Measles NP ELISA (IgM) kit for Measles infection.

**Results:** Out of 171 suspected Measles sample 61 cases were sero-positive for Measles and 17 cases were sero-positive for Rubella. Out of 61 Sero-positive samples of Measles, 31 samples were of males, rest 30 samples were of females.

**Conclusion:** Increased Measles vaccine coverage, timely investigation and application of specific control measures can control the outbreak.



**OP 38**

**SEROPREVALENCE OF CHIKUNGUNYA IN JLN MEDICAL COLLEGE**

## OP 40

## STUDY ON FUNCTIONAL OUTCOME OF RECONSTRUCTION OF ACROMIOCLAVICULAR JOINT DISLOCATIONS TYPE III TO TYPE VI USING TIGHT ROPE WITH ENDOBUTTON

**Dr Bansod Satishkumar<sup>1</sup>, Dr A. K. Mehra<sup>2</sup>**

*1Resident, 2Senior Professor Department of Orthopaedics, R.N.T. Medical College, Udaipur*

**Introduction-** Acromioclavicular joint are common in physical active young adults, mostly involves in sports activities. It is male predominant and account 9% of all shoulder injuries. Tight rope and endobutton reduces the chances of clavicular fracture across the tunnels and avoids hardware related complications.

**Aims and Objectives:** To study functional outcome of acromioclavicular joint dislocation by using tight rope and endobutton.

**Materials and methods:** This is prospective study of 25 cases of AC joint dislocations type iii to vi admitted between oct 2017 to march 2019. Out of 25 only 16 patients was operated. In procedure, clavical tunnel made, tight rope passed around coronoid process and through clavicular tunnel and secure with endobutton.

**Results:** In our study M:F of 17:8 and mean age of 44 years having right side predominance, average blood loss 150 ml functional outcome by CONSTANT score got 4 complications. 8 patients got excellent result, 6 good, 2 adequate results.

**Conclusions:** AC joint dislocation type iii to type iv using tight rope with endobutton have excellent result give less complications and rigid fixation with extensive tensile strength allowing physiological motion between clavical and corocoid, endobutton avoid stress concentration over bone bridge between the two tunnels. Tight ropes prevents necessities of biological tendinous graft.

**Keywords:** Acromioclavicular joint(AC joint), endobutton, tight rope.

## OP 41

### Large multiple Omental Cyst: A Case Report

**Dr Anil Meena**

*Resident, Department of General Surgery, RNT Medical College, Udaipur*

**Background:** Mesenteric and omental cyst are the rare intraabdominal pathologies occurring in approximately one of 105,000 to 140,000 hospitalized patients Only 2.2% of these cysts are omental cysts

**Material and methods-** A 55 year-old female with complaints of vague abdominal pain and lump abdomen came to our opd. The laboratory tests CBC,  $\beta$  HCG,  $\alpha$  Fpr, CEA and Ca 125. Ultrasonography (US) and CECT abdomen

**Result:** Complete excision of the cyst is considered as the treatment of choice. Recurrence and malignant deterioration of omental cysts are rare. We describe a 55 year-old female who presented with complaints of vague abdominal pain and distension. The patient underwent laparotomy with preoperative diagnosis of the ovarian cyst.

**Conclusion-** The diagnosis of omental cyst was established by intra-operative findings. Thus, complete excision of the cyst was performed. The diagnosis was confirmed by pathological examination.

## OP 42

## MARJOLIN'S ULCER: CLINICOPATHOLOGICAL STUDY

Dr. Hari Om Bairwa

*Resident, Department of General Surgery, RNT Medical College, Udaipur*

**Background-** A Marjolin ulcer is a cutaneous malignancy that arises in the setting of previously injured skin, longstanding scars, and chronic wounds. Historically, Marjolin ulcers are named for French surgeon Jean Nicolas Marjolin and first described as ulcerations with dense villi arising within a burn cicatrix.

**Methods:** This is a retrospective study of histologically confirmed cases of Marjolin's ulcer seen at RNT Medical collage Udaipur, over a period of 2 years between May 2017 to February june 2019. Data were retrieved from patients' files

**Result:** A total of 94 cases were studied. Most common causative factor was flame burn scar (91.5%). The mean latent period between original injury and diagnosis of Marjolin's ulcer was  $12.04 \pm 4.25$  year. Most common site was lower limb (55.3%) followed by upper limb (26.6%).

**Conclusion:** Marjolin's ulcers are not rare in our setting and commonly occur in flame burn scars that were not skin grafted and were left to heal secondarily. Excise and (if possible) primary close all chronic wounds



## OP 43

### MALROTATION OF GUT IN ELDERLY

**Dr. Rajkumar**

*Department of Surgery, RNT Medical College, Udaipur*

**Introduction:** Rotational abnormalities of the intestine occur when the normal embryologic rotation and fixation of the intestinal mesentery fails to take place.

**Materials & methods:** Laxmi Lal , 65 years old male came to Surgery Emergency at MBGH , Udaipur, with the complaints of flatulence, fullness of upper abdomen – 6 months , pain abdomen – 1 month & vomiting-1 month

**Result** – Exploratory laprotomy and ladd's procedure was done

**Conclusion-** The incidence of ladd's band in elderly is very rare and it mostly remains asymptomatic or diagnosed in post-mortem stages. For this reason, it is crucial that all surgeons operating on adult patients have firm knowledge of intestinal embryology and its anatomic variations.

## OP 44

## COMPARISON OF NEUROMUSCULAR BLOCKADE AND RECOVERY CHARACTERISTICS OF CIS-ATRACURIUM VERSUS ATRACURIUM IN ELECTIVE SURGICAL PATIENTS: A PROSPECTIVE RANDOMISED DOUBLE BLIND CLINICAL STUDY

**Dr. Krishna Boliwal<sup>1</sup>, Dr. Indira Kumari<sup>2</sup>, Dr. Santosh Choudhary<sup>3</sup>,  
Dr. Suman Karir<sup>1</sup>**

*1Resident, 2Senior Professor, 3Assistant Professor Department of Anaesthesia, RNT Medical College, Udaipur*

**Background:** The ideal neuromuscular blocking agent for intubation should have a rapid onset, brief duration of action, free from hemodynamic changes, devoid of residual paralysis and provide excellent intubating conditions.

**Aim:** To compare cis-atracurium with atracurium in terms of onset, duration, and recovery from neuromuscular blockade.

**Methodology:** A Prospective Randomised Double blind clinical study was carried out on patients of age group 18-65 years who were undergoing surgical procedure with an anticipated duration of at least one hour under general anaesthesia in Maharana Bhopal Government Hospital, Udaipur. A total of 100 patients were included in the study and randomised in Group A included 50 patients were received Inj.Atracurium with initial dose of 0.5 mg/kg followed by Maintenance dose of 0.1 mg/kg and Group B included 50 patients were received Inj.Cis-atracurium with initial dose of 0.2 mg/kg followed by maintenance dose of 0.04 mg/kg.

**Results:** Onset time of block in group A( $5.00 \pm 0.77$  min) significantly longer than in group B( $4.11 \pm 0.42$  min). Mean duration of block and Recovery time from block in group A( $30 \pm 3.95$  min &  $25.72 \pm 4.01$  min respectively) were significantly shorter than group B( $46.60 \pm 6.61$  min &  $44.04 \pm 10.74$  min).

**Conclusion:** Cis-atracurium in dose of 0.2 mg/kg seems to be better alternative to atracurium 0.5 mg/kg in providing faster onset, intermediate duration of action with faster recovery and it can be used for intubation as well maintenance.

## OP 45

## PERINATAL OUTCOME IN PREGNANCIES THROUGH ART

**Dr Smita Baheti, Dr Pooja Patel, Dr Khushboo Patel**

*Department of Gynaecology & Obstetrics, GMCH, Udaipur, Rajasthan*

**Introduction:** Infertility is now a days a global problem affecting couples. Infertility, prevalent among one in every four couples in the developing countries, is a neglected problem. A significant proportion of women postpone their pregnancy due to education and career to late into the fourth and fifth decade. ART includes in vitro fertilization with or without intracytoplasmic sperm injection, fresh or frozen embryo transfer IVF with donor oocytes, intrauterine insemination either with ovarian stimulation or in unstimulated cycles. As mother having ART treatment is mostly from higher age group, chronic hypertension and diabetes mellitus may be pre-existing leading to further exaggeration during pregnancy. And if not from higher age group then various factors like endometrial, ovarian, PID, endocrinal problem have significant effect on perinatal outcome and complication.

**RESULTS:** Total number of 193 patients who have taken ART have been included in our study. 51(48.57%) out of 105 patients had PIH in singleton ART as obstetrical complication which is most common in our study. 41(46.59%) out of 88 patients had pre-term delivery in multiple gestation ART as a most common obstetrical complication in our study. 16(15.24%) out of 105 patients had Chronic HTN in singleton ART and 14(15.91%) out of 88 patients had Chronic HTN in multiple gestation ART as maternal complication which is most common in our study. Out of 283 fetus, 41(14.48%) -IUGR, 9(3.18%) -fetal anomaly and 17(6.01%) were IUD.

**CONCLUSION:** This study helps us to understand that this ART pregnancies are high risk for maternal and fetal complication.



# POSTER PRESENTATIONS



## P 1

**MUCOCELE OF APPENDIX: A RARE CASE REPORT****Dr Anil Meena***Resident, Department Of General Surgery, RNT Medical College, Udaipur*

**Introduction-** Appendiceal mucocele is a descriptive term that implies a dilated appendiceal lumen caused by the accumulation of mucus.

**Material and Methods-** A 63-year-old female came with complaints of abdominal pain in rt iliac fossa, dull aching, intermittent since 2 months with increase in intensity since 8-10 days. At opd general surgery at MBGH Udaipur. For work up Routine investigation, usg, cect abdomen is done.

**Result-** Surgery was done and appendix is sent for histopathological examination which show mucinous cystadenoma of appendix

**Conclusion-** Mucocele of the appendix constitutes an important differential diagnosis in patients presenting with pathologies in their right lower abdominal quadrant.



## P 2

## A CASE OF OCULAR SURFACE SQUAMOUS NEOPLASIA (OSSN)

**Dr Archana O Gulati, Dr Nutan Bedi, Dr Sharda Punjabi, Dr Rishi Mehta, Dr Lipa Mohanty**

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**Background:** OSSN encompasses conjunctival intraepithelial neoplastic lesions (CIN) and invasive squamous cell carcinoma (SCC) of conjunctiva and cornea. Although many factors have been implicated, human papilloma virus (HPV6, 11, 16, 18) and exposure to ultraviolet B radiations (UV-B) have been found to be the most important ones. UV-B causes p53 mutation, pyrimidine dimer formation and damage to nucleotide excision repair sequence, which is responsible for DNA repair. Hence, a higher number is found in patients having more outdoor activity, smoking, pale complexion, xeroderma pigmentosum.

**Case Details:** 70 year old female, working as a farmer, presented with the chief complaint of a mass in the interpalpebral area of the right eye nasally since 1 year. The mass was single, sessile, amelanotic, fixed and non-friable. The mass measured 1\*0.8\*0.6cms in size, covered the conjunctiva, grew beyond the limbus and was encroaching the cornea with feeder vessels. The mass was excised in toto after discerning a suitable plane. Cryotherapy was done all around the excised tissue. An amniotic membrane graft was placed with fibrin glue.

**Biopsy:** Dysplastic squamous epithelium extending into the underlying stroma, having pushing margins, confirming SCC.

**Conclusion:** Histopathology is the gold standard in diagnosis of OSSN, reflecting its prognosis. Complete excision with cryotherapy gives excellent results with localised lesions. Though, localised chemotherapy and brachytherapy have also been recommended. However, a regular follow up is mandatory to check for recurrence.

## P 3

**A STUDY OF EFFECTS OF ALCOHOL CONSUMPTION ON LIPID PROFILE IN A TERTIARY CARE CENTRE OF KUMAON REGION****D.P.Shukla<sup>1</sup>, Sangeeta Singh<sup>2</sup>, Seema Gupta<sup>3</sup>, Ashok Kumar<sup>4</sup>**

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**Background:** The effects of moderate alcohol consumption on the lipid profile are well-documented, showing an association between alcohol-induced increases in HDL-C levels and cardioprotection. Various epidemiologic studies suggest a protective effect of low to moderate alcohol consumption against cardiovascular disease (CVD) events. This cardioprotective effect of alcohol has been attributed largely to its effect of raising high density lipoprotein cholesterol (HDLc). Recent evidence documents elevated lipoprotein-a (Lp-a) as a causal risk factor of cardiovascular diseases.

**Aims:** Aims of the present study were to estimate the lipid profile-total cholesterol (TC), high density lipoprotein cholesterol (HDLc), low density lipoprotein cholesterol (LDLc), triglycerides (TG) and Lp-a in alcoholic subjects and their age and sex matched non alcoholic controls, to study the association between the levels of lipid profile markers and the degree of alcohol consumption & to study the correlation between Lp-a and different lipid profile parameters in alcoholic subjects.

**Methodology:** The study population consisted of 100 alcoholic subjects and 50 age and sex-matched controls in the age group of 25-60 years. Alcoholics were classified into different categories based on their alcohol consumption in terms of drinks per week. Serum Lp(a) was estimated by turbidimetric immunoassay, serum level of total cholesterol by cholesterol oxidase and peroxidase method, serum HDLc by cholesterol esterase and cholesterol oxidase method, serum triglycerides by enzymatic method and LDLc was calculated using Friedwald equation.

**Results:** The mean serum Total cholesterol, serum HDLc, serum LDLc and serum Lp(a) levels were significantly raised ( $p < 0.05$ ) in alcoholics as compared to controls. The mean serum HDLc levels in heavy drinkers was significantly lower ( $p < 0.05$ ) as compared to moderate and occasional drinkers. The mean serum Total cholesterol, serum LDLc and serum Lp-a levels in heavy drinkers were significantly higher ( $p < 0.05$ ) as compared to low-moderate drinkers. In our study, serum Lp-a had significant positive correlation with LDLc (0.0066;  $p < 0.05$ ).

**Conclusion:** Our study shows that occasional and moderate drinkers had significantly high serum levels of HDLc while moderate drinkers also had significantly low level of triglycerides. There was a significant rise in serum levels of all lipid profile parameters except HDLc in heavy alcohol drinkers as compared to moderate drinkers. This suggests a beneficial effect of moderate alcohol intake but a large scale study needs to be done to confirm the above findings.

P4

## A CASE OF BILATERAL MULTIPLE CHORIDITIS

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Lipa Mohanty, Dr. Rishi Mehta**

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**Background-** Multifocal choroiditis is usually bilateral but asymmetrical, chronic/recurrent disease that typically affects young and middle aged adult females. Aetiology : idiopathic, secondary to tuberculosis, syphilis, ocular histoplasmosis syndrome. Clinical features includes blurring, floaters and photopsia. Fundus : multiple discrete, ovoid , yellowish grey lesions(50-350 um) at posterior pole and/or periphery as linear clusters or streaks. Peripapillary atrophy, disc edema may be present. Investigations: Perimetry; blind spot enlargement, F.A. ;early hypo fluorescence and late hyper fluorescence

**Case Details-** A 50yr old lady presented with the complain of diminution of vision since 2 months, her best corrected vision in both eyes was counting finger 2metre. She had history of pulmonary tuberculosis 1.5 yr back for which she had taken complete treatment , also she was diabetic since 20yrs. On dialated fundus examination: multiple yellowish ovoid patches seen in periphery (large in right eye, small in left eye). On perimetry: arcuate scotoma seen in both eyes. The patient was given 1gm i.v. Methyle prednisolone in 100ml saline over 4hrs for 3 consecutive days. Everyday her vision, fundus and field tests were recorded.

**Results-** After 3 days her best corrected vision improved to 6/36(rt eye) 6/24(lft eye) e. Fundus showed black pigmentation over yellow patches resembling healing. Perimetry showed no significant changes.

**Conclusion-** Steroids are found to be effective in treating multifocal choroiditis and also preventing complications: cystoid macular edema, choroidal neovascularisation.

## HEPATOBLASTOMA: A RARE PRESENTATION IN ELDERLY

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**Background:** Hepatoblastoma is one of most common liver cancer but it is comparatively a rare variety of solid tumor in paediatric age. The disease usually affects children below the age of 3 yrs. Hepatoblastoma (HB) accounts for 79 % of all the liver tumors in children. Though it is usually seen in childhood, very few cases of adult hepatoblastoma were reported worldwide. Alpha Feto Protein (AFP) is a sensitive and specific marker of the tumor for early diagnosis and monitoring.

**Case Report:** A 84 year old male patient was admitted in medical ward of RNT Medical College and MBGH, Udaipur, Rajasthan with the history of fever, cough, shortness of breath, left sided chest pain ,abdominal mass with loss of weight and appetite.This was progressively increasing in the past six months.

**Discussion:** Hepatoblastoma is one of the most common primary malignant neoplasms of the liver in children and around 90 % of the cases are found usually before the age of 5years.HB in adolescents ,young adults is a rare disease and is further rarest above the age of 70 years.

**Conclusion:** Hepatoblastoma is one of the rarest liver malignancy presenting in adolescent and old age people .The very low incidences of this disease in old age and its non specific presentation makes the diagnosis difficult.These patients may present in very late stage of the disease where there may have already been the spread of the malignancy to different organs of the body.

## P 6

## PREANALYTICAL ERROR SOURCES: PEDIATRIC LABORATORY EXPERIENCE

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**Background:** Accurate laboratory results are known to be effective in approximately 70% of medical decisions & important in disease detection, classification, treatment, and follow-up.

**Aim:** Evaluate records within a year for samples rejected in a biochemistry laboratory.

**Methodology:** Data of rejected samples in clinical biochemistry lab M.B. Hospital R.N.T. Medical College Udaipur between June 2019 and November 2019 were retrospectively screened. Errors were evaluated according to their type and working groups.

**Results:** A total 408 samples were received in clinical biochemistry laboratory further, 26 (6.3%) samples were rejected Because of the detection of preanalytical errors, while the more common sources of error were inappropriate sample volumes. Besides, more common errors were observed in hemolysed samples.

**Conclusion:** It is extremely important to keep the error-prone preanalytical error that affects the quality of the test results of a laboratory under control to obtain accurate and qualified results. Error proofing should be planned by taking into account the characteristics of the samples received by clinical biochemistry laboratory.

## ASSOCIATION BETWEEN ESOPHAGEAL VARICES (EV) & SERUM ASCITES ALBUMIN GRADIENT (SAAG) IN PATIENTS WITH CHRONIC LIVER DISEASE

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**Background:** Portal hypertension is clinically significant in patients with cirrhosis. Evaluation of portal pressure performed through endoscopy which is invasive procedure and it involves catheterization of hepatic vein. Ascites and EV both are the major complications of portal hypertension and can be used as tools to judge the severity of liver disease.

**Aim:** To evaluate the association between esophageal varices and SAAG in patients with chronic liver disease (CLD).

**Methodology:** A total of 100 patients diagnosed for CLD with ascites were enrolled in the study. SAAG was measured for all patients. EV was assessed by endoscopy. Association of SAAG and EV was evaluated by applying appropriate statistical test.

**Results:** 87% patients had a SAAG value  $>1.1$ . On applying 'Chi square test', a strong association of EV was observed with high SAAG value  $>1.1$  ( $X^2=46.43$ ;  $P=<0.0001$ ). SAAG value of  $>1.1$  was observed to have a sensitivity of 96.4% and a negative predictive value of 84.6% for EV.

**Conclusion:** SAAG  $>1.1$  has a strong association with EV. The study concludes that SAAG  $>1.1$  can be a predictor of EV among ascites patients.

**Keywords:** Portal hypertension, chronic liver disease, Cirrhosis, SAAG.



## BACTERIOLOGICAL STUDY OF WOUND INFECTIONS AND ITS ANTIBIOGRAM IN A TERTIARY CARE HOSPITAL

**Dr. Jatin Rao**

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**Background:** Wound infections can be caused through two major sources: exogenous and endogenous bacteria. The probability of wound infection largely depends on the patients systemic host defenses, local wound conditions and microbial burden. Despite modern surgical techniques and the use of antibiotic prophylaxis, Surgical Site Infection (SSI) is one of the most common complications encountered in surgery. SSI places a significant burden on both the patient and health system. SSI is thus a major cause of morbidity, prolonged hospital stay and increased health costs.

**Objective:** Aim of this study was to identify and isolate various bacteria from wound infections in a surgical intensive care unit and to study their antibiogram.

**Methodology:** Two wound swabs were collected from the wound and from a drop of aspirate, smear was made on clean glass slide and Gram staining was done for direct microscopic examination under oil immersion 100X objective to know various morphological types of bacteria and presence or absence of inflammatory cells. Second swab/drop of aspirate was used for culture by inoculating it on routine media like Blood Agar, Nutrient Agar and Mac Conkeys agar, incubated at 37° C for 24 hours aerobically.

**Results:** Out of 238 pus samples, 209 (88.6%) were culture positive for bacterial growth and no growth was observed in 29(12.4%) cases. Out of 209 bacterial culture positive cases, 201 were monobacterial and 8 were poly bacterial. Out of 201 bacterial isolates; *Staphylococcus aureus* (56/26.6) was the commonest followed by *Pseudomonas aeruginosa* (47/22.4%).

**Conclusion:** The study concludes that variety of aerobic bacteria is responsible for wound infections with predominance of *Staphylococcus aureus* followed by *Pseudomonas aeruginosa*. This study further will help in formulating a Antimicrobial Stewardship for hospital , in order to reduce morbidity and mortality.

## DENGUE FEVER AND GUILLAIN-BARRE SYNDROME: A RARE CLINICAL ASSOCIATION

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Dengue fever is one of the most important vectors borne tropical disease transmitted mainly by female *Aedes aegypti* mosquito. The common symptoms may be in form of high grade fever, headache, periorbital pain, myalgia, arthralgia, fatigue, nausea, vomiting and skin rashes in mild cases to renal, hepatic, haemorrhagic tendencies, shock and neurological involvement in severe cases. Incidences of neurological symptoms varied from 0.5-2% in recent years. Guillain-Barre syndrome (GBS) may be one of the rare presentations following dengue viral infection and only 20 cases of GBS were reported worldwide and most of cases were in paediatric age group whereas very few cases reported in adult. Hence, we are reporting a case of 24 years old male presented with GBS which occurred during recovery phase of dengue fever.

**Key words:** Dengue fever, *Aedes aegypti*, Guillain-Barre syndrome

## P 10

**BACTERIOLOGICAL PROFILE OF MICROORGANISMS ISOLATED FROM THE HAND AND NASAL SWABS OF HEALTH CARE WORKERS IN INTENSIVE CARE UNITS****Dr Laveena Shekhawat***Resident, Department of Microbiology, GMCH, Udaipur*

**Introduction:** Health-care associated infections are most frequently seen in intensive care units (ICUs), which are commonly caused by multi-drug resistant pathogens. Health care workers (HCWs) colonized with multi-drug resistant pathogens can serve as vehicles for transmission of infections to the patients.

**Objectives:** The objectives of the study included isolation and identification of potentially pathogenic microorganisms from the hand and nasal swabs of HCWs posted in ICUs, determination of their antibiogram and estimation of their carriage rates among HCWs.

**Methodology-** A total of 120 samples (60 hand swabs, 60 nasal swabs) collected from 60 health care workers in various ICUs were processed. Antibiotic sensitivity testing was performed using Kirby-Bauer disk diffusion method as per CLSI guidelines.

**Results and discussion:** Out of 120 samples, 94 (77.68%) were Methicillin Resistant coagulase negative Staphylococci and 6 (4.95%) were Methicillin resistant Staphylococcus aureus. Other isolates were methicillin sensitive coagulase negative staphylococci (n=6), Enterococcus species (n=1), Klebsiella pneumoniae (n=2), Proteus mirabilis (n=1) and Citrobacter freundii (n=1). Two ESBL producing Gram negative isolates (Klebsiella pneumoniae and Proteus mirabilis) were recovered from the nasal swab of a doctor posted in Medicine ICU. Resistance to Erythromycin, Cotrimoxazole and Minocycline was observed in 86.17% (81/94), 47.87% (45/94) and 7.44% (7/94) of MRCONS isolates respectively. None of the isolates was resistant to teicoplanin. Fifty percent (3/6) of the MRSA isolates showed resistance to Cotrimoxazole and Erythromycin whereas all were sensitive to Minocycline, Teicoplanin and Linezolid. The carriage rates of MRSA and MRCONS among all health care workers were 10% (10/60) and 93.33% (56/60) respectively. It was observed that 95.65% (22/23) of doctors and 91.42% (32/35) of nursing staff were carriers of MRCONS. The carriage rates of MRSA among the doctors and nursing staff were 8.69% (2/23) and 11.42% (4/35) respectively.

**CONCLUSION:** This study concluded that 93.33% and 10% of health care workers in ICUs were colonized with MRCONS and MRSA respectively. Infection control practices like hand hygiene, appropriate use of antibiotics, and screening and decolonization of health care workers can help in the prevention of health-care associated infections.

## A STUDY ON SERUM TOTAL BILIRUBIN AND SERUM URIC ACID IN TYPE 2 DIABETES MELLITUS PATIENTS AND CONTROL SUBJECTS

**Dr Mahendra Saini, Dr. Rajendra Malav, Dr. Ashima Madan,  
Dr. Manoj Kumar Garg**

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**Background:** Type II diabetes is the most prevalent form of diabetes and has increased. Bilirubin is a yellow color compound that occurs in the normal catabolic pathway that breakdown heme in vertebrate. In humans and other primates, the final product of purine degradation is uric acid, which is excreted in the urine. Bilirubin as a cardio protective agent by scavenging lipid peroxides and other products of physiological oxidation. High uric acid may be a novel risk factor for type 2 diabetes mellitus.

**Aims:** The aim of the present study is to evaluate and analyze the level of serum total Bilirubin and uric acid in type 2 diabetes mellitus.

**Methodology:** This study was conducted on 100 subjects (50 cases, 50 controls) aged between 30-55 years. Biochemical investigation included FBS and Serum uric acid and Serum total Bilirubin. These tests were performed in auto analyzer using commercially available kit.

**Results:** Mean level of serum uric acid was significantly higher in cases as compared to control whereas serum bilirubin level was significantly lower in cases as compare to controls.

**Conclusion:** Hyperglycemia is a case that promotes oxidative stress. All these findings show that Bilirubin acts as a natural endogenous antioxidant. Physiological levels of total Bilirubin block the production of various free radicals. Uric acid act as pro oxidant, particularly at an increase concentration and may thus be a marker of oxidative stress.

P 12

## SEROPREVALENCE OF HCV IN HEMODIALYSIS PATIENTS AT A TERTIARY CARE CENTRE

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Prateek Kamble**

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**Background:** Hepatitis C Virus (HCV) is a RNA virus of family Flaviviridae, genus Hepacivirus. HCV infection is more common among hemodialysis patients than the general population and transmission of HCV in dialysis units has been reported.

**Aims :** This study has been done to evaluate the seroprevalence of HCV infection in the patients receiving hemodialysis at JLN hospital, Ajmer. And to compare its incidence with that of the general population.

**Methodology:** A total of 6704 blood samples that were received in our laboratory were tested for anti HCV antibodies from April 2019 – September 2019. The test used was 4th generation HCV TRIDOT rapid test for qualitative detection of antibodies to HCV in human serum/plasma.

**Results:** Seroprevalence of HCV infection in the entire population was found to be 1.22%, and of patients on hemodialysis was 0.65% , making it 53.79% of the total seroprevalence. A male predominance was observed in the positive results.

**Conclusion:** Our study showed that the incidence and prevalence of anti HCV in patients on hemodialysis is fairly high and it was observed that majority of the cases were nosocomial. And there is a need to ensure recommended infection control practices, including standard precautions, thorough regular audits and training of the staff to bring this number down.

## A STUDY OF SERUM HIGH SENSITIVITY C- REACTIVE PROTEIN (hs-CRP) AND SERUM CREATININE IN PATIENTS WITH SUBCLINICAL HYPOTHYROIDISM

**Dr Manna Lal Kumawat, Dr Deepa Thadani, Dr G.G.Kaushik,  
Dr. Sarla Mahawar, Dr Ajay Jain**

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**Background:** Triiodothyronine (T3) and thyroxine (T4) are two hormones produced and released by thyroid gland. They are tyrosine -based hormones that are primarily responsible for regulation of metabolism.

**Aims:** To estimate level of serum high sensitivity c-reactive protein (hs-CRP) and serum creatinine in patients of Subclinical Hypothyroidism and healthy controls. To compare their levels among these groups.

**Methodology:** This is descriptive case control study and was conducted in the Department of Biochemistry, J.L.N. Medical College and Associated group of Hospitals, Ajmer(Raj.). 60 cases of Subclinical Hypothyroid patients attending Medical OPD of J.L.N. Hospitals were included and 30 age-sex matched euthyroid controls were selected. Biochemical estimation were performed after taking approval from Ethical Committee. Biochemical parameters of this study were measured by following methods-Thyroid Profile (T3, T4, TSH) by- Chemiluminescence Immunoassay method, serum hs-CRP by Immuno-turbidimetric method and serum creatinine by –Jaffes’ colorimetric kinetic method.

**Results :** It was found that mean serum hs-CRP and serum creatinine were elevated in patients of Subclinical Hypothyroidism as compared to Euthyroid subjects (controls) and were highly significant ( $P < 0.0001$ ).

**Conclusion :** We concluded that patients with Subclinical Hypothyroidism showed significant increase in serum hs-CRP and serum creatinine.



P 14

## A COMPARATIVE STUDY OF SERUM UREA, CREATININE, SODIUM, POTASSIUM AND CHLORIDE IN DIABETIC AND NON- DIABETIC PATIENTS

**Dr. Manoj Kumar Garg, Dr. Mahendra Saini, Dr. Rajendra Kumar Malav, Dr. Ashima Madan**

*Department of Biochemistry, Govt. Medical College, Kota*

**Background:** Diabetes Mellitus is the Most non-communicable disease in the world. Renal complication is one of the major complications apart from cardiovascular, neurological & microvascular complication. These complications are increased nowadays due to sedentary life style and increase prevalence of obesity.

**Aims:** The objective of this study was to compare serum urea, creatinine, sodium, potassium and chloride levels in diabetes and non-diabetes and further correlate the serum urea, creatinine, sodium, potassium and chloride levels in both diabetic and non-diabetic subjects.

**Methodology:** Blood samples were collected and analyzed for serum urea, creatinine, sodium, potassium and chloride levels in diabetic and non-diabetics individuals attending in a tertiary care hospital GMC, Kota. 50 subjects in age group 31-60 years were selected for diabetic and non-diabetics. Fasting blood sugar levels of all subjects were determined.

**Result:** 9 out of 50 diabetic subjects had high urea level whereas 5 out of 50 had increased creatinine level. There was statistically significant increase in urea level with increase blood sugar level ( $p < 0.05$ , 95%CI) serum  $K^+$  level significantly increased ( $p < 0.05$ ) in diabetic patients whereas  $Na^+$ ,  $Cl^-$  levels were not significant ( $p > 0.05$ ).

**Conclusion:** It is concluded that diabetic patients have a close association with deterioration in renal health with increased levels of serum urea, creatinine and potassium.

## A CASE OF OSTEOID OSTEOMA OF TIBIA

**Dr Meet Patel,**

*Department of Orthopedics, GMCH, Udaipur*

**Background:** Osteoid osteoma is a benign neoplasm, most common in second and third decades of life. Half the cases involve the femur or tibia. The tumour may be found in cortical or cancellous bone without any predilection for malignant change. The most common and typical symptom is pain at the site of tumour which exaggerates at night. The pain is dramatically relieved with NSAIDs (high levels of COXs and PGs have been found in these lesions). Other modalities used are surgical management or percutaneous radio ablation.

**Case Details:** 18yr old male, with c/o pain and swelling (3x2cm) on the medial aspect of middle part of left tibia. Pain was more severe at night relieved temporarily with NSAIDs. X-ray showed a sclerotic lesion within the Lt. Tibia shaft about 3 cm in length and 1 cm in thickness, giving a probable diagnosis of osteoid osteoma. The diagnosis was further confirmed by a CT scan which showed focal diaphyseal sclerotic lesion with central lucent focus.

**Method:** The patient was treated by surgical treatment with excision of lesion with the nidus without bone grafting. A specimen was sent for biopsy. Patient was followed up at 1, 2 and 4 months.

**Conclusion:** Surgical management in cases of Osteoid osteoma with complete excision of lesion and curettage along with the nidus gives very satisfactory results. The recurrence rate is very low and the patient's symptoms are relieved.

P 16

## EVALUATION OF THYROID PROFILE IN TYPE 2 DIABETES MELLITUS

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**Background:** Diabetes mellitus (DM) and thyroid dysfunction (TD) are the two most common endocrine disorders in clinical practice.

**Aim:** The objective of this study was to investigate the prevalence of TD in patients with type 2 diabetes mellitus & measured the prevalence of SCH (SUBCLINICAL HYPOTHYROIDISM) in T2DM population.

**Methods:** It is a case control study along with 170 cases and 50 controls between the age group of 30-80 years who were all attending in medicine, surgery and endocrinology department OPD at HERITAGE INSTITUTE OF MEDICAL SCIENCES, VARANASI. Data were analyzed with SPSS version 21 & P value < 0.05 was considered significant.

**Result:** In our study overall 33.5% occurrence of thyroid dysfunction was found in Diabetic patients. Among this, highest prevalence was 21.2% of subclinical hypothyroidism followed by 8.8% of hypothyroidism and 3.5% of hyperthyroidism. There was a positive association of TSH with LDL-c and TC.

**Conclusion:** Our study shows that SCH and DM add to major problems such as retinopathy and neuropathy. Study have proved that increased prevalence of hypothyroidism especially subclinical hypothyroidism in T2DM patients hence it may be advisable to check thyroid status in every T2DM patients for the better management.

## A STUDY OF SERUM URIC ACID AND LIPID PROFILE LEVELS IN NORMOTENSIVE AND HYPERTENSIVE SUBJECTS

**Dr Rajendra Kumar Malav, Dr Manoj Kumar Garg, Dr Mahendra Saini, Dr Ashima Madan**

*Department of Biochemistry, GMC, Kota*

**Background:** According to WHO 2002, Cardiovascular Disease Will Be Largest Cause of Death and Disability By 2020 In India. Hyperuricemia Is Becoming A Modest Problem All Over the World with A Steady Progress in Its Prevalence. It Is Widely Accepted That Hypertension Is Associated with Increased Blood Level Of LDL, TG And TOTAL Cholesterol.

**Aims:** The Aim of the Present Study to Examine the Epidemiological Evidence and Provide Overview of The Association Between Blood Pressure, Serum Lipids and Serum Uric Acid.

**Methodology:** This Study Was Conducted On 100 Subjects (50 Cases And 50 Control) In Age Group 30-60 Years and Analyzed for Blood Pressure, Blood Levels of Serum Uric Acid and Lipid Profile in Outdoor Patients Of NMCH, Kota. Data Has Been Analyzed According to Age, Sex and Race Sub Groups.

**Results:** The Mean Uric Acid Level in Hypertensive Males and Females Were  $6.1 \pm 0.78$  mg/dl and  $5.5 \pm 0.93$  mg/dl Respectively. The Serum Levels Of TC, TG, And LDL Were Higher While HDL Levels Were Lower in Hypertensive Subjects Compared to Normotensive, Which Was Statistically Significant ( $P=0.001$ ).

**Conclusion:** It Is Concluded That Hypertensive Patients Have A Close Association with Dyslipidemia and Hyperuricemia and Patients Need Regular Follow Up for Blood Pressure and Other Parameters to Prevent Complications.

P 18

## SCRUB TYPHUS WITH CEREBROVASCULAR ACCIDENT (INTRA CEREBRAL HAEMORRHAGE)- A RARE CASE PRESENTATION

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Udaipur(Rajasthan)*

Scrub typhus is one of the common zoonotic disease seen in tsutsugamushi triangle and have high case fatality rate. This disease may present with varied clinical presentation from acute febrile illness, thrombocytopenia, to neurological manifestation. The common neurological manifestation may be meningitis and meningoencephalitis where rare may be cerebrovascular accident i.e. intracerebral haemorrhage. Intracerebral haemorrhage may be due to vasculitis or thrombocytopenia in these patients.

**Key words:** Scrub typhus, Meningoencephalitis, Intracerebral haemorrhage, Thrombocytopenia

P 19

## THE PREVALENCE OF HEPATITIS B VIRUS AMONG HIV-POSITIVE PATIENTS AT TERTIARY CARE HOSPITAL AJMER

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**Background:** This study aimed to estimate the prevalence of hepatitis B virus among HIV-positive patients at tertiary care hospital Ajmer.

**Methods:** This study is conducted in J. L. N. Medical College & Associated groups of Hospitals patients attending from ICTC (G). 500 samples are taken randomly from January 2018 to June 2018

**Results-** There are 17 samples positive for HBsAg out of 500 Samples, so prevalence for HBsAg is 3.4%. Seroprevalence is highest in age group of 36-45 year (41.17%) followed by 29.41% 16-25 age group.

**Conclusion-** The prevalence of HBsAg found (3.4%) is considered to be moderately endemic in PLWHIV in this setting.



P 20

## STUDY OF SERUM ELECTROLYTES AND HEMOGLOBIN IN PATIENTS WITH HEAD AND NECK CANCER

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**Background:** Cancer is among the five most common causes of death, accounting for 9.5% of all death in developing countries. Cancer is associated with several biochemical derangements specially Electrolyte imbalance and Anemia. Anemia can affect the quality of life and shorten the survival of patients with cancer.

**Aim:** The present study was planned to evaluate Serum Electrolytes levels Sodium (Na<sup>+</sup>), Potassium (K<sup>+</sup>) and Chloride (Cl<sup>-</sup>) and Hemoglobin of Cancer patients.

**Methodology:** Case-Control Study. Serum Electrolytes (Na<sup>+</sup>/K<sup>+</sup>/Cl<sup>-</sup>) were determined in 50 Head and Neck Cancer Patients and 50 age and sex matched healthy individuals were taken as control. Diagnosed cases of Head and Neck Cancer age 18-65 years were included and patients on Chemotherapy, Radiotherapy and Post Operative cases were excluded from the study.

**Results:** On comparing mean serum electrolytes levels of cancer patients with control group, a significant decrease was noted for Serum Sodium ( $133.30 \pm 6.61$  p<0.0001), Potassium ( $3.16 \pm 0.56$  p<0.0001) and Chloride ( $97.08 \pm 7.54$  p<0.0001). Hemoglobin levels were also significantly low ( $9.19 \pm 1.74$  p<0.0001) among cancer patients.

**Conclusion:** Causes of Dyselectrolytemia may vary from the etiology of disease to its treatment protocol. Monitoring of serum electrolytes during screening as well as follow up of cancer treatment is recommended for proper clinical management. Anemia among cancer patients is of primary concern as it increases the challenges of treatment protocols.

**Key words:** Malignancy, Hyponatremia, Hypokalemia and Dyselectrolytemia

## LEVEL OF CYSTATIN C IN PATIENTS WITH METABOLIC SYNDROME AND ITS CORRELATION WITH METABOLIC SYNDROME COMPONENTS

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**Background:** Metabolic syndrome (MetS) comprises 20-25% of adult population of world. In India 29% of female and 23% of males are affected. MetS is characterized by central obesity, hypertension, dyslipidemia (elevated triglyceride and LDL with low HDL) and elevated plasma glucose. The most important underlying risk factors are abdominal obesity and insulin resistance.

**Aims:** To determine serum CystatinC levels in metabolic syndrome (MetS) patients and its correlation with components of MetS.

**Methodology:** This study included 90 cases of MetS and 30 controls. MetS cases were further divided into 3 group of 30 patients each. Group 2 had any 3 components, group 3 had any 4 components and group 4 had all 5 components of MetS. Cases of MetS were compared with 30 apparently healthy controls included in group 1. Age, height, weight, body mass index, Waist circumference were measured. Systolic blood pressure and diastolic blood pressure, Fasting plasma glucose, serum total cholesterol, serum triglycerides, low density lipoprotein, very low density lipoprotein, high density lipoprotein, urea, creatinine, estimated glomerular filtration rate and CysC were measured in each individual. Correlation of CysC with each component of Mets was studied.

**Result:** CysC was significantly increased in MetS patients as compared to control. Level of CysC was positively correlated with waist circumference, fasting glucose level, triglycerides, Systolic and diastolic blood pressure and negatively correlated with HDL. No significant difference found in urea, creatinine, and eGFR.

**Conclusion:** As CysC is significantly correlated with individual components of Metabolic Syndrome therefore CysC may be used as an early marker of renal dysfunction as well as increase in metabolic abnormality.

P 22

## HEPATITIS B, C AND HIV INFECTIONS AMONG BLOOD DONORS IN ZONAL BLOOD BANK J.L.N. HOSPITAL AJMER

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**Background-** Blood transfusion is one of the most important tools in modern medical therapy and saving patient's life is its aim. Hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV) infections are coincidentally found in blood donors, which can be life-threatening. Keeping this scenario in mind, this study was done.

**Objective-** To study the occurrence of HIV, HBV, and HCV and their co-infections among blood donors

**Methods-** A retrospective observational data based study was conducted from January to dec. 2019 at the Zonal Blood Bank of the JLN Hospital Ajmer. Serologic screening for HBsAg, anti-HCV and anti-HIV1/2 for all samples were confirmed by ELISA.

**Results-** A total of 7580 donors were identified. Out of which 7505 were male and 75 were females. The median age of donors was 31 years (range: 19 to 50 years). Among blood donors HIV, HBV and HCV infection occurrence were 0.04 %, 0.75% and 0.066% respectively. No Coinfection was observed among HIV, HBV and HCV.

**Conclusion-** There is a need to review policies for blood collection from donors, by modifying the algorithm of blood donors testing. Pretesting potential donors using rapid tests could help to avoid collection and destruction of (infected) blood.

## **CO-INFECTION OF SCRUB TYPHUS, DENGUE AND CHIKUNGUNYA FEVER IN AN ACUTE FEBRILE ILLNESS PATIENT: A RARE CASE PRESENTATION.**

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Jat<sup>1</sup> , Dr. Shreya Binakarya<sup>1</sup>**

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Patients presenting with acute febrile illness are commonly diagnosed as Malarial fever, Scrub typhus fever and Dengue fever in Indian subcontinent. Coinfection with three Vector borne disease Scrub typhus, Dengue and Chikungunya are extremely rare. Here we report a case of 60 year old female presenting with acute febrile illness diagnosed with coinfection in a tertiary health care centre in Southern Rajasthan. Management includes monitoring vitals, platelet counts, watch on bleeding manifestation and maintaining adequate fluid intake. There should be a high degree of suspicion of co infection in case of acute febrile illness presenting with joint pain and multi organ system involvement which reduces overall health burden, morbidity, mortality by increasing diagnostic accuracy.

P 24

## DENGUE FEVER: A TRIGGERING FACTOR FOR IMMUNE THROMBOCYTOPIC PURPURA IN ADULT FEMALE – A RARE CASE REPORT

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**Background:** Immune thrombocytopenic purpura (ITP) is a rare autoimmune disorder characterized by low platelet count and skin-mucosal bleeding. It is known that immune thrombocytopenic purpura can be both primary and secondary. The secondary form of this disease may occur in association with viral infections, systemic lupus erythematosus, antiphospholipid antibody syndrome, immune deficient states, lymphoproliferative disorders and drugs. In adults it is usually idiopathic and dengue has been rarely reported as a triggering factor of ITP.

**Case Report :** We report a case of a young adult woman with dengue fever that presented with erythematous rash over the bilateral lower limbs and haemorrhagic blister formation over buccal mucosa and history of fever with chills had significant fall on platelet counts which was 7000/mcL and was not improved on multiple random donor platelet & single donor platelet transfusions, her bone marrow aspiration was done which showed erythroid hyperplasia, her ANA&APLA was negative, which ruled out all other possibilities and diagnosis of ITP was made. Patient was started on oral glucocorticoids, after 6 days platelet count was improved without new purpura development and other bleeding tendencies with followup visit it further improved after 10 days.

**Conclusion:** This case shows the dengue fever as a triggering factor for immune thrombocytopenic purpura and condition improved by oral glucocorticoids.

**ITP:** Immune Thrombocytopenic Purpura, ANA: Antinuclear Antibody, APLA: Antiphospholipid Antibody

## A RARE CASE OF UNILATERAL HYPERTENSIVE RETINOPATHY DIAGNOSED WITH ATHEROMATOUS CAROTID ARTERY STENOSIS

**Dr Aval Patel, Dr Rishi Mehta, Dr Lipa Mohanty, Dr Nutan Bedi, Dr Sharda Punjabi**

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**Background-** Hypertensive retinopathy as a result of systemic hypertension, usually presents bilaterally. Unilateral or asymmetric hypertensive retinopathy is very rare and almost always caused by significant stenosis of the internal carotid artery proximal to the origin of the ophthalmic artery on the unaffected side typically at carotid bifurcation due to atheroma and less commonly, due to coarctation and arteritis.

**Case details-** A 65yr old male presented to eye OPD with c/o diminution of vision in both eyes since 6 months. His vision in RE was 6/9 & in LE was 6/12. IOP of RE was 27 & LE was 12 mmhg. Fundoscopy of left eye revealed arteriolar attenuation, cotton wool spots and multiple flame shaped hemorrhages suggestive of grade-3 hypertensive retinopathy while right eye fundus was normal. His average blood pressure was 210/130 mmhg.

Carotid doppler showed atheromatous plaque in right carotid bulb causing 20-25% luminal narrowing and plaque in right internal carotid artery causing 40-45 % luminal narrowing. Atheromatous plaque in left internal carotid artery causing 30-35% of luminal narrowing.

**Conclusion-** Whenever encountering unilateral hypertensive retinopathy, carotid stenosis should be suspected. Early diagnosis and proper systemic examination can help in preventing deadly outcomes and provide good quality of life to patient.



P 26

**A COMPARATIVE STUDY OF LIPID PROFILE AMONG  
PATIENTS OF CHRONIC KIDNEY DISEASE UNDERGOING  
HEMODIALYSIS AND PERITONEAL DIALYSIS AT S.M.S.  
MEDICAL COLLEGE JAIPUR**

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**Background-** Chronic kidney disease is defined as either kidney damage or  $\text{GFR} < 60\text{ml/min/1.73 m}^2$  for  $\geq 3$  months with or without evidence of kidney damage, irrespective of the cause. Dialysis is the process for removing waste and excess water from blood, and is used primarily to provide an artificial replacement for the lost kidney function in people with renal failure.

**Aim-** To compare the effect of Hemodialysis and Peritoneal Dialysis on lipid profile of patients of chronic kidney disease.

**Methodology-** Study was undertaken in the department of biochemistry in SMS medical college, Jaipur with 60 diagnosed Chronic kidney disease cases (30 patients undergoing hemodialysis & 30 patients undergoing peritoneal dialysis) after all necessary clearance was obtained we measured serum level of lipid profile comprising of Total cholesterol, triglycerides, HDL-C, LDL-C, VLDL-C.

**Results-** Serum Total Cholesterol value was in Hemodialysis patients  $145.98 \pm 25.84$  & in Peritoneal Dialysis  $175.75 \pm 29.79$  where p value  $< 0.001$  which is statistically significant.

**Conclusion-** Out of both Dialysis modalities Peritoneal dialysis patients develop a somewhat different and probably more atherogenic lipid profile than do hemodialysis patients. So among patients with cardiovascular diseases the risk for death was higher in peritoneal dialysis patients than in Hemodialysis patients.

## BACTERIAL PROFILE AND ANTIBIOGRAM OF BURN WOUND INFECTIONS IN A TERTIARY CARE CENTRE

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**Background:** Burn patients are at high risk for infections related morbidity and mortality. It is essential for a burn institute to determine its specific pattern of time –related changes in microbial flora and antimicrobial profile.

**Aims:** To find out the bacterial profile of burn wound infection and the antimicrobial pattern of isolated organism.

**Materials and Methods:** This study was conducted in department of microbiology, J.L.N. Medical college, Ajmer, Rajasthan, from Jan. 2019 to Sept. 2019. The wound swabs were collected from 102 patients. The samples were processed as per standard protocol. Pathogens were isolated, identified by biochemical tests and antibiotic susceptibility testing was performed by Kirby-Bauer disc diffusion method.

**Results:** Out of 102 samples, 99(97.1%) were culture positive and 3(2.9%) were sterile. Most common isolated was *Pseudomonas* species (34.3%) followed by CoNS species (25.2%), *Klebsiella* species (19.2%), *Staphylococcus aureus* (14.1%), *Enterobacter* species (7.1%), *Enterococcus* species (7.1%), *Escherichia coli* (5.1%), *Streptococcus* species (3%), *Proteus* species (1%). Gram positive cocci were most susceptible to Linezolid (95.9%) and Gram negative organism were most susceptible to Aztreonam (38.8%).

**Conclusion:** Continuous monitoring and careful lab testing prior to antibiotic use can reduce drug resistant. Judicious use of antibiotics can help in proper treatment and prevention of emergence of multidrug resistant pathogens like MRSA and ESBL producers.

P 28

## A CASE OF INTUSSUSCEPTION

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**Introduction:** Adult intussusception is a rare entity which constitutes 5-10% of all intussusceptions.

In adults 90% have a cause for intussusception which is usually a polyp, adenoma, adhesion, hamartoma or a tumour as lead point.

**Material and methods:** A 32 year old male presented to our general surgery department with abdominal pain, melena and vomiting for 1 week. For workup Xray abdomen, USG abdomen, CECT abdomen

**Result:-** His CT abdomen showed submucosal lipoma 2.7\*2.3cm causing ileoileal intussusception. He underwent ileal resection and ileoileal anastomosis.

**Conclusion:-** CT proves to be the most effective preoperative diagnostic method. However, there is almost always a pathological reason for adult intussusception, making surgery unavoidable in most cases.

## A RARE CASE OF UNILATERAL MACULAR COLOBOMA

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**Background:** Coloboma is derived from a greek word meaning "curtailed". A coloboma is a condition where normal tissue in or around the eye is missing at birth. Congenital coloboma is a very rare birth defect with a prevalence of 0.5 - 0.7/10000 live births. Macular coloboma refers to a well circumscribed excavated defect in the choroid and retina at the macular area associated with diminution of vision.

**Case Details:** 20 year old female, presented with chief complaints of diminution of vision and deviation of left eye since birth. On ophthalmic examination her best corrected visual acuity in right eye was 6/6 and left eye was 6/60 with eccentric fixation. She had alternative exotropia with dominant right eye. Prism bar test showed 40-50 prism dioptre deviation. Fundus examination of left eye showed a round to oval sharply demarcated lesion having pigmented margins involving the macula with large choroidal vessels and bare sclera at the base. OCT macula of the left eye showed a crater like depression accompanying atrophic neurosensory retina and the absence of of retinal pigment epithelium and choroid.

**Conclusion:** Congenital macular coloboma is thought to result from incomplete differentiation of the arcuate bundles along the horizontal raphe during development. However, the morphology of macular lesion is very similar to that of post-inflammatory congenital macular scars resulting from ocular toxoplasmosis. Hence differentiation among these is important to reach to an appropriate etiological diagnosis.

P 30

## ESTIMATION OF SERUM LIPID PROFILE AND GLYCOSYLATED HAEMOGLOBIN IN NON DIABETIC HYPERTENSIVE PATIENTS

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**Background:** Dyslipidemia can be seen in non-diabetic hypertensive patients also. Hypertension with dyslipidemia can serve as a predictor cardiovascular disease.

**Aim:** The aim of this study was to determine serum lipid profile & glycosylated hemoglobin in Non diabetic hypertensive patients and it was compared with normotensive control subjects.

**Methodology:** This was a Cross Sectional study, conducted in Gandhi Medical College Bhopal, (MP) from January 2013 to December 2013. This study enrolled 100 non diabetic hypertensive patients under the supervision of specialist doctor and 50 normotensive controls. Serum Lipid Profile was estimated by enzymatic method. Glycosylated hemoglobin was estimated by Cation Exchang Resin method.

**Results:** In present study significantly higher ( $P < 0.001$ ) triglycerides, total cholesterol and glycosylated hemoglobin levels and significantly decreased HDL-C level ( $P < 0.001$ ) were found in non-diabetic hypertensive patients compared with normotensive controls. It was also observed that elevated HbA1C patients was on greater risk of hypertension.

**Conclusion:** HbA1C can serve a predictor of CVD and stroke. This study concludes that HbA1C in cardiovascular disease may be partially mediated by the development of hypertension.

## HIV 1 & 2 CO-INFECTION WITH HEPATITIS-B POSITIVE CASE STUDY IN J.L.N. MEDICAL COLLEGE & ASSOCIATED HOSPITAL, AJMER

**Dr. Meenu Choudhary, Dr. Jyotsna Chandwani,  
Dr. Vijaylatha Rastogi**

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**Background:** India 3rd highest burden of HIV in the world. Most cases of AIDS caused by HIV-1 strain worldwide, which discovered in 1983. In 1986 a new strain of HIV was isolated in west African patient called HIV -2. HIV -2 is less frequent than HIV -1. HIV-2 is a long term, non progressive, less likely to respond to ART than HIV-1. HIV1&2 co-infection case less common.

**Case Report:** 40 years male admitted in medicine department complaining of abdominal distension, shortness of breathing. The patient was referred to ICTC for HIV testing. For diagnose of HIV using NACO HIV testing guidelines. For HIV testing used combs aids, meri screen, HIV tri dot. Case was found HIV 1 & 2 positive. He was referred to NRL (Delhi) for confirmation they confirmed it. Patient was found Hepatitis -B positive and also diagnosed extra pulmonary tuberculosis.

**Conclusion:** The treatment option for HIV-1 & 2 co-infection case is limited and ineffective we need the exact prevalence and incidence of HIV-1 & 2 co-infection in our country to establish proper guidelines to know the burden of disease and proper early treatment.



P 32

## ANALYSIS OF SURGICAL SITE INFECTIONS IN OBGYN AT A TERTIARY CARE HOSPITAL

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**Background:** Surgical Site Infection (SSI) are the most common nosocomial surgical infection, occurring in 2-5% of surgical patients. It is defined as an infection that occurs at or near the surgical incision within 30 days of the procedure, which included a purulent exudate draining from a surgical site, or a positive fluid culture obtained from a surgical site that was closed primarily.

**Aims:** To determine the incidence of postoperative wound infection in obstetrics and gynaecological surgeries along with the causative organisms and their Anti-susceptibility patterns.

**Methodology:** This is a retrospective study conducted at J.L.N. medical college and Hospital, Ajmer during November 2018-November 2019. Postoperative wound swabs were collected aseptically from patient who underwent major gynaecological and obstetric procedures but developed SSI. Samples were processed as per standard microbiological procedures.

**Results:** During this period 1097 major surgical procedures were included in the study out of which 70(6.3%) developed SSI. Postoperative wound infection rate was high in swabs collected from emergency LSCS wounds. Coagulase negative Staphylococcus (39.2%) was the predominant bacteria isolated, followed by E.coli (13.7%). Gram positive isolates were resistance to Clindamycin (44.4%), Erythromycin(76.4%), Ciprofloxacin (73.6%). All Gram positive isolates were susceptible to linezolid and Vancomycin. Gram negative isolates were resistant to Cefixime (100%), Cefpodoxime (86.6%), Cefuroxime (98.6%). Majority of Gram negative isolates were susceptible to Ceftriaxone (60%), Ampicillin/ sulbactam (52.9%) and meropenem (99%).

**Conclusion:** In this study, postoperative wound infection rate was found to be 6.3%. The highest number of SSIs were found to be from emergency LSCS wounds. Coagulase negative Staphylococcus was found to be the predominant bacteria isolated.

## ASSESSMENT OF OUTCOME OF DISTAL RADIUS INTRA-ARTICULAR FRACTURES USING WRIST SPANNING MINI-FIXATOR IN DISTRACTION

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**Background:** Most of the intra-articular distal radius fractures are complex and unstable. Many different methods of treatment have been advocated such as closed reduction maintained by cast, K-wire fixation with cast, ORIF or External fixation.

**Aim:** This study is done to assess the success rate following the treatment of comminuted intra-articular fractures of the distal radius via closed reduction and use of a mini external fixator.

**Materials And Methods:** 10 patients with distal end intra-articular radius fractures coming to our institute from June 2019 to December 2019 were treated with wrist spanning mini external fixator. Patients were evaluated at 6 weeks and 3 months using mayo wrist score. External fixator was removed after 6-8 weeks after the fracture showed signs of consolidation.

**Results:** Out of 10, 3 patients required additional k wire fixation. At the end of three months excellent results were seen in 2 patients, good results were seen in 6 patients, and fair in 2 patients. The patient's wrist range of motion gradually increased at consecutive clinical evaluations.

**Conclusion:** Wrist spanning mini external fixator is a promising modality for surgical fixation of intraarticular fractures of lower end radius. It allows anatomical reconstruction of the articular surface, stable fixation of fracture fragments, and care of soft tissue injuries, without a high rate of complications.

P 34

## AEROBIC BACTERIAL PROFILE OF CHRONIC SUPPURATIVE OTITIS MEDIA AND THEIR SUSCEPTIBILITY PATTERN

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Dr. Jyotsna Chandwani, Dr. Geeta Parihar**

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**Background:** Chronic suppurative otitis media is a common cause of hearing impairment in India. It is a chronic inflammation of the middle ear cleft characterized by perforation of tympanic membrane with persistent drainage from middle ear for more than 6weeks. This study was done to see the occurrence of bacterial profile from CSOM patients attending J.L.N Hospital, Ajmer.

**Aim:** To isolate causative aerobic microorganisms and their antibiotic sensitivity and resistance pattern in CSOM patients.

**Material and method:** This was a retrospective observational data-based study, which was conducted in Department of Microbiology, J.L.N. Medical College and Hospital, Ajmer from August 2019 to December 2019. Aural swabs were taken from patients of CSOM with active purulent discharge and cultured for aerobic bacteria as per standard Protocol and antibiotic susceptibility testing was performed as per CLSI Guidelines.

**Result** -43 cases of CSOM were taken and their Culture reports showed aerobic bacterial isolates in 37 cases (86.04%). Most common organism isolated was pseudomonas species 20 cases (54.05%) followed by COPS 7 cases (18.91%), CONS 5 cases (16.21%), Enterococcus species 2 case (5.40%) Streptococcus species 1 case (2.70%), E. coli 1 case (2.70%). Gram positive cocci were most susceptible to Vancomycin and Linezolid (100%). Gram negative organisms were most susceptible to Meropenem (100%) and resistant to cefixime (100%). Four cases of ESBL in CSOM patients were found in this study.

**Conclusion:** Continuous and periodic evaluation of microbiological profile and antimicrobial sensitivity pattern of bacterial is essential for optimum management of CSOM patients.

## SITUS INVERSUS TOTALIS WITH ATRIAL SEPTAL DEFECT: A RARE ASSOCIATION

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Situs inversus totalis is the complete inversion of position of the thoracic and abdominal viscera. It may be isolated or associated with malformations, especially cardiac and/or alimentary. Usually it remains asymptomatic and is discovered as an incidental finding in adulthood, but sometimes it may be discovered during infancy itself due to associated anomalies. We report a 19-year-old male found to have situs inversus totalis in association with Atrial Septal defect (ASD) while presenting to a medical OPD. This incidental finding situs inversus totalis in association with Atrial Septal defect (ASD) was detected by physical examination and was confirmed later by echocardiogram and other radiological studies. This report underscores the need for proper and complete physical examination with special emphasis on cardiovascular system examination for patients presenting with dextrocardia/situs inversus.

**Keywords:** Situs inversus totalis, Atrial septal defect, Congenital Heart disease.

P 36

## STUDY OF THE BASELINE WIDAL TITRE AMONG HEALTHY INDIVIDUALS IN HADOTI REGION OF RAJASTHAN, INDIA

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Dr Ghanshyam Soni<sup>3</sup>, Dr Dinesh Verma<sup>4</sup>**

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**Background:** The Widal titres among the healthy populations of different areas differ substantially and this depends upon the endemicity of typhoid in each area, which has been changing over time.

**Aim:** To determine the average baseline titre of the apparently healthy population in Hadoti region of Rajasthan, India.

**Materials and Methods:** Non-repetitive blood samples were collected from healthy blood donors (n= 150) of the age group of 20-50 years, of both sexes, who attended blood bank of New medical college and hospital Kota from August 2019 to Nov 2019. 0.5 ml of the 2 fold serially diluted sera (dilutions from 1:20 to 1:320) in 0.9% normal saline were tested by adding an equal amount of antigen and the tubes were then incubated overnight at 37°C in a water bath.

**Results:** Among the 150 serum specimens which were tested, 87 (58%) sera were found to be positive for the Widal test and 63 were negative. The baseline titre for TO and TH was noted to be 1:40 and that for AH and BH was noted to be 1:20.

**Conclusion:** Based on the above results of our study, it has been recommended that the cut-off titre of 1:80 for both anti-O antibodies and anti-H antibodies of *Salmonella Typhi* and 1:40 for anti-H antibodies of *Salmonella Paratyphi A* and *B* may be considered as diagnostic for enteric fever in Hadoti region of Rajasthan.

## DRUG REACTION WITH EOSINOPHILIA AND SYSTEMIC SYMPTOMS (DRESS) SYNDROME IN A PATIENT TAKING CARBAMAZEPINE: A CASE REPORT

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**Introduction:** Drug reaction with eosinophilia and systemic symptoms syndrome is a potentially life-threatening hypersensitivity reaction with rash, fever, and internal organ involvement, often hepatitis, occurring most commonly two to eight weeks after initiation of a medication. The present case is an example of severe and potentially life-threatening liver injury as a manifestation of drug reaction with eosinophilia and systemic symptoms syndrome evaluated with the RegiSCAR scoring system as a "definite case" possibly induced by carbamazepine in a patient.

**Case presentation:** We report a case of anti-epileptic-induced drug reaction with eosinophilia and systemic symptoms syndrome in an 40 year old man who presented with a two-three day history of rash, periorbital and upper extremity edema, hepatitis and fever. Laboratory findings revealed an atypical lymphocytosis, eosinophilia, and elevated serum transaminases. No drug allergies were reported at the time of presentation, but carbamazepine therapy had been initiated five weeks prior to hospital admission for new-onset seizures. Carbamazepine was discontinued on hospital admission, and after three days of high-dose corticosteroid therapy the patient experienced resolution of both his symptoms and laboratory markers of inflammation.

**Conclusion:** Given the significant mortality attributed to drug reaction with eosinophilia and systemic symptoms syndrome, medical personnel should be aware of the potential for this severe hypersensitivity reaction and should ensure close follow-up and offer anticipatory guidance when beginning any new medication, particularly anti-epileptic therapy. Early recognition of drug reaction with eosinophilia and systemic symptoms syndrome and initiation of appropriate therapy are imperative in limiting morbidity.



P 38

## SERUM ADENOSINE DEAMINASE AND URIC ACID AS POTENTIAL INDICATORS OF SEVERITY IN PREECLAMPSIA

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**Introduction:** Preeclampsia is a multisystem disorder, characterized by hypertension ( $>140/90$  mmHg) with proteinuria ( $>300\text{mg}/24\text{hours}$ ), oedema or both, induced by pregnancy usually after 20 weeks of gestation. It contributes 3-10 % of all pregnancies.

Preeclampsia is associated with alteration of cell mediated immune response and endothelial cell dysfunction. Adenosine Deaminase (ADA) is a marker of altered cell immune response. It increased with severity of the disease. Uric acid is a major purine catabolism product. Elevated levels of serum uric acid reflect the degree of placental cell destruction as well as severity of the disease.

**Objectives:** To correlate serum ADA and serum Uric acid level in preeclampsia and its relationship with severity of the disease.

**Methodology:** The study was conducted on three groups-mild preeclampsia (N=30), severe preeclampsia (N=30) and age matched normotensive healthy pregnant women as controls (N=30). ADA and Uric acid level were measured in maternal serum by Giusti G. and Galanti B. method and Uricase-PAP method respectively.

**Results:** We found that serum ADA and uric acid level were significantly increased in preeclampsia patient as compared to normotensive pregnant women. Our result shows that serum ADA and Uric acid levels have increased as disease progress from mild to severe condition.

**Conclusions:** Serum ADA increased in preeclampsia due to enhanced cell mediate immune response and endothelial dysfunction. Hyperuricaemia in preeclampsia is due to increased purine catabolism caused by trophoblast breakdown.

## SPECIATION OF ENTEROCOCCUS AND ITS ANTIBIOTIC SUSCEPTIBILITY PATTERN IN BLOOD ISOLATES

**Dr Aditi Kothari, Dr Jatin Rao 2nd year PG,  
Dr A.S.Dalal HOD Microbiology**

**Background** - Enterococcus comprised of gram-positive cocci in pairs or short chains considered saprophytes of the human gastrointestinal tract. They can survive on inanimate objects such as thermometers and stethoscopes. Enterococcus species have become a problem for the world as emerging nosocomial infection due to its multi drug resistance

**Aim-** To isolate enterococcus up to species level from blood isolates To see the antibiotic susceptibility pattern among the isolated organism

**Methodology** - The study was carried out in the Department of Microbiology of GMCH Udaipur, a total of 2068 blood specimen was collected, amongst them 1669 was declared no growth, 256 were gram negative bacilli, in 69 specimen gram positive cocci was isolated 19 were staphylococcus aureus, 34 were non-pathogenic organism and 16 were enterococcus 7 among these were Enterococcus faecium 5 were Enterococcus faecalis 4 were Enterococcus gallinarum

**Result :** All enterococcal isolates were sensitive to linezolid, tigecycline, teicoplanin and daptomycin, 3 amongst these were resistant to vancomycin, HLGR seen in 1 isolate

**Conclusion** The changing spectrum of Enterococcal infections and emergence of antimicrobial resistance among isolates. The results show a shift from E. faecium to E. faecalis to E. faecium as the dominant enterococcal species. And also indicates that continuous surveillance of the bacteria should be done.

P 40

## HEPATOBLASTOMA

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**Background & Aims-** A case report on Hepatoblastoma. It is an uncommon malignant liver cancer occurring in infants and children and composed of tissue resembling fetal liver cells, mature liver cells or bile duct cells. They usually present with an abdominal mass.

**Methodology-** A 11 year old male child presented to OPD of Geetanjali medical college and hospital with complaints of abdominal pain, fever. On general examination- Pallor +, inguinal lymphadenopathy +, Per abdominal palpation revealed a solid mass like structure in the right hypochondrium. Liver palpable.

**Results:** Lab investigations revealed moderate anaemia with thrombocytopenia with high AFP and normal LFT. USG shows mild hepatomegaly with lobulated contour, multiple well defined isogenic to echogenic nodules & mild splenomegaly. On CT heterogeneous enhancing soft tissue density mass at lesser sac probably arising from left lobe of liver. Biopsy shows nests of medium sized cells resembling fetal hepatocytes where intranuclear inclusions seen suggestive of hepatoblastoma.

**Conclusion-** Hepatoblastoma is an uncommon primary malignant tumor in childhood. CT can be used for diagnosing metastasis and MRI is the best investigation for differentiating morphology from other tumors. AFP is most important marker for hepatoblastoma. Diagnosis is based on reduced number of AFP levels, clinical features and histopathological morphology of tumor and metastasis. Complete resection of the tumor is the mainstay of treatment. Chemotherapy may be used.

## LAPROSCOPIC MEDIAN ARCUATE LIGAMENT RELESE FOR COELIAC TRUNK STENOSIS UNDER GENERAL ANAESTHESIA : A CASE REPORT.

**Dr. Abhay Gondaliya, Dr. Sunanda Gupta,  
Dr. Seema Partani, Dr. Charu Sharma**

*Department of Anaesthesia, GMCH, Udaipur, Rajasthan*

**Introduction :** Stenosis of coeliac trunk due to fibrous band continuation of median arcuate ligament is very rare condition called median arcuate ligament syndrome.

**Case:** A 22 year female patient with symptoms of abdominal pain, nausea, vomiting since 2 years & admitted at GMCH due to worsening of abdominal pain & post prandial abdominal fullness. CECT abdomen showed fibrous band in continuation of median arcuate ligament causing focal stenosis around 40-50% of proximal coeliac trunk for segment of 5 mm & associated with post stenotic dilatation with absence of associated atherosclerosis suggestive of median arcuate ligament syndrome.

**Management:** Laproscopic median arcuate ligament release was done under general anaesthesia. Intra operatively slow infusion of low dose vasopressor & steroids given to avoid vascular & neurological complications.

**Result:** CECT abdomen on post-operative day 2 was done which suggested released coeliac trunk stenosis. Patient became pain free and hemodynamically stable.

**Conclusion:** During median arcuate ligament relese surgery intra operatively slow infusion of vasopressor & steroids given to maintain hemodynamic stability & to decrease neurological complications.

P 43

## IMPACT OF ANTIOXIDANT THERAPY ON ANTIOXIDANT CAPACITY IN HYPERTENSIVE PATIENTS

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**Background:** Hypertension exerts a substantial public health burden on cardiovascular health status and healthcare systems in India. Vascular oxidative stress and essential hypertension has a causal relationship which could be nullified by antioxidants like Vitamin C and Vitamin E.

**Aim:** To estimate the impact of antioxidant therapy on Antioxidant Capacity in Hypertensive patients.

**Methodology:** 30 randomly selected hypertensive patients were given Supradyn tablet once a day for 45 days. FRAP, Superoxide Dismutase, Glutathione reductase, Glutathione Peroxidase and reduced Glutathione assays were measured before and after the intervention therapy.

**Results:** Total antioxidant capacity as measured by serum FRAP in hypertensive patients before and after the therapy was increased significantly from  $578.8 \pm 60.85$  to  $592.1 \pm 59.66$  ( $\Delta$ moles/L) respectively. The levels of SOD, GPx, Glutathione Reductase and Glutathione in Hypertensive Patients before giving Antioxidant Therapy were  $1.6 \pm 0.49$ U/ml,  $184.6 \pm 17.1$  $\Delta$ mol/l/min,  $8.96 \pm 1.15$  $\Delta$ mol/l/min and  $8.03 \pm 0.96$  $\Delta$ mol/gm of Hb respectively. The same after giving them Antioxidant Therapy were  $1.7 \pm 0.46$ U/ml,  $182.4 \pm 15.98$  $\Delta$ mol/l/min,  $8.83 \pm 1.11$  $\Delta$ mol/l/min and  $7.83 \pm 0.94$  $\Delta$ mol/gm of Hb respectively. The levels of Glutathione Peroxidase, Glutathione Reductase and Glutathione were significantly decreased after giving antioxidant therapy for 45 days while Superoxide Dismutase level did not change significantly.

**Conclusion:** Antioxidant therapies for 45 days led to a significant increase in total antioxidant capacity as shown by plasma FRAP levels and serum levels of enzymatic antioxidants like Glutathione Peroxidase, Glutathione Reductase and Glutathione in Hypertensive patients. However, serum levels of Superoxide Dismutase did not show a significant change.

## A CASE REPORT OF DOUBLE PLATING WITH BONE GRAFTING IN AN UNSTABLE DISTAL FEMUR FRACTURE

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**Background:** Fractures of the distal part of the femur may pose difficult therapeutic problems. Dissatisfaction with non-anatomical reduction with conservative management. Ninety-five degree blade-plates and screw- plates necessitate a intact bone. All above are contraindicated in distal femur unstable fracture. So, Now double plating for comminuted fractures in use.

**Case History:** A 40 year male patient presented in the emergency room at GMCH, Udaipur with complains of pain and deformity in right knee. On x-ray, was found to have a Comminuted Intercondylar with supracondylar fracture of distal femur. He was then operated using Swashbuckler approach for lateral femoral plate. After three weeks, it was deemed to be in varus and hence was again operated where a medial plate was applied with bone grafting. Aim of this study to evaluate post-operative range of motion (clinically) and union using x-rays.

Patient was evaluated using X-rays and clinically. He was found to have achieved union by twelve weeks. Patient was found to have no valgus or varus deformity in follow up. The patient showed significant improvement in range of motion (0-120 degrees) with excellent outcome without any complication.

**Conclusion:** By using Dual plating fixation we conclude that dual plating is efficient method of management in terms of anatomical reduction, varus deformity correction and stable fixation of "unstable distal femur fracture with bone graft" having no complications.



P 45

**COEXISTENCE OF DOWLING DEGOS DISEASE WITH  
RETICULATE ACROPIGMENTATION OF KITAMURA IN  
THREE GENERATIONS OF A FAMILY: A RARE  
PHENOMENON.**

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**Abstract:** Dowling-Degos disease (DDD) is an uncommon, autosomal dominant (AD), genodermatosis characterized by numerous, symmetrical, reticulated flexural hyperpigmented macules. There is frameshift mutation in the keratin 5 (KRT5) gene which has its gene locus on chromosome 17p13.3. Reticulate Acropigmentation of Kitamura (RAK) is also a reticulate pigmentary disorder that is characterized by atrophic, hyperpigmented macules presenting on acral skin. Both these disorders are variable phenotypic expressions of a single spectrum of disease. We are hereby presenting a family showing AD inheritance of DDD and RAK.

## A HOSPITAL-BASED STUDY OF THYROID PEROXIDASE ANTIBODY TEST IN PATIENTS WITH HYPOTHYROIDISM

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**Background:** The most common causes of thyroid diseases and primary hypothyroidism is autoimmune thyroid disease (AITD). Hashimoto thyroiditis leads to destruction of the thyroid follicular cells through a cell mediated autoimmune process. Thyroid peroxidase antibody is major autoantibody of autoimmune thyroiditis. It fixes complement and directly causes damage to thyroid cells.

**Aim:** To find association of thyroid peroxidase antibody with hypothyroidism

**Methodology:** An observational study was conducted in the department of biochemistry and medicine involving 100 patients with biochemical evidence of hypothyroidism in SGT medical college, hospital and research institute, Gurugram, Haryana, for the duration of 24 months from May 2017 to May 2019. Patient history, clinical examination and various investigation including triiodothyronine (T<sub>3</sub>), thyroxine (T<sub>4</sub>), thyroid stimulating hormone (TSH) and Thyroid peroxidase antibody were done

**Results:** Out of total 100 hypothyroid patients, 93 were female and 07 were male. Subclinical hypothyroidism (77 %) was more common than overt hypothyroidism (23%). Thyroid peroxidase antibody test was positive in 51 patients with hypothyroidism.

**Conclusion:** Serum TSH and thyroid peroxidase antibody analyses are essential in determining the etiology of hypothyroidism and risk of progression to overt hypothyroidism in patient with subclinical hypothyroidism.

**Keywords:** autoimmune thyroid disease, anti-thyroid peroxidase antibody.

P 47

## EXTENSIVE PHACOMATOSIS PIGMENTOVASCULARIS WITHOUT ANY EXTRACUTANEOUS ABNORMALITY

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Phacomatosis pigmentovascularis (PPV) is a rare congenital syndrome which is characterised by concurrent presence of a vascular malformation and pigmentary nevus in same individual. The disease often involves extracutaneous sites such as eye, neurological system and connective tissue hamartomas and are associated with morbidities such as glaucoma, developmental delay, seizures, intracranial calcification, and cerebral atrophy. The disease has been classified majorly into four types depending upon the presence of different vascular and pigmentary lesions and systemic involvement. It is believed to be an abnormality in the development of melanocytic nevus cells and vasomotor neural cells derived from the neural crest. We hereby present a case of PPV type IIa with presence nevus of ota along the course of ophthalmic division of left trigeminal nerve with widespread port wine stain involving trunk and limb. Rarity of this case lies in the fact that despite the extensive cutaneous involvement, there was absence of any systemic comorbidity.

## A RARE ENTITY- MPAL- BIPHENOTYPIC (B/T LYMPHOID) ACUTE LEUKEMIA

**Dr. Priyanka Goyal, Dr. R.M Jaiswal,  
Dr. Parul Gautam, Dr. Ashish Gupta**

*Department of Pathology, Mahatma Gandhi Medical College and Hospitals,  
Jaipur, Rajasthan*

**Introduction-** Mixed phenotypic acute leukemias (MPALs) are acute leukaemias of ambiguous lineage which have blasts that express antigens of more than one lineage. They can contain distinct blast populations each of a different lineage, one population with multiple antigens of different lineages on the same cells, or a combination. We reported a case of MPAL with both B-cell and T- cell lineages.

**Case Report-** A 62 year old male presented to Mahatma Gandhi medical college and hospitals with complains of fever and bodyache since one month. On investigation, patient was reported as  $\Delta$ AML(51%blasts) on CBC, LDH was increased upto 1061.4 U/L, In LFT serum bilirubin, SGOT and alkaline phosphatase were mildly raised and S, RFT were normal. Bone marrow examination and immunophenotyping were advised. Bone marrow findings were consistent with findings of acute leukemia and immunophenotyping findings were suggestive of MPAL- Biphenotypic (B/T lymphoid) acute leukemia.

**Discussion-** Ambiguous- lineage leukaemias are rare accounting for < 4% of all acute leukemia cases. In some documented cases of leukemia, the blasts show clear- cut evidence of both T-cell and B-cell lineage commitment. This is a very rare phenomenon, with a frequency that is even lower than has typically reported in the literature . Flow cytometry is the preferred method for establishing the diagnosis, especially when a diagnosis of MPAL requires demonstrating coexpression of lymphoid and myeloid differentiation antigens on the same cell

P 49

## MANAGEMENT AND OUTCOME IN TWO OBSTETRIC PATIENTS FOLLOWING NON OBSTETRIC SURGERY - CASE REPORT:

**Dr.Rajeshwar Zala, Dr.Sunanda Gupta, Dr.Charu Sharma**

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**Background:** Anaesthesia for pregnant patients presenting for non-obstetric surgery needs a detailed understanding of the physiological changes and altered pharmacokinetics of pregnancy.

**Aims:** To preserve maternal safety, maintain pregnant state and achieve the best possible foetal outcome.

**Case- 1** details: A 19 year old primigravida with alleged history of left upper limb crush injury and history of 8 months amenorrhoea was subjected to surgical interventions thrice. A below elbow amputation under supraclavicular block was done and subsequently on post-operative day 7 wound lavage and on post-operative day 11 skin grafting under total intravenous anaesthesia was done. Perioperatively for foetal conservation intravenous steroids and tocolytics were given.

**Results:** Following the procedures foetal well-being was confirmed by sonography.

**Case-2** details: A 26 year old primigravida with past history of myomectomy, admitted with complain of 16 weeks amenorrhoea and intestinal obstruction was posted for exploratory laparotomy under general anaesthesia. Perioperative intravenous tocolytics and steroids were given. Patient was stable haemodynamically and was extubated and shifted to post-operative ward.

**Results:** Sonography on post-operative day 2 was done which was normal. Spontaneous abortion occurred on post-operative day 4 in spite of all precautionary measures. She developed wound dehiscence on post-operative day 17 for which resuturing was done under local anaesthesia and was discharged on postoperative day 19.

**Conclusion:** Multidisciplinary team approach is essential for maternal and foetal outcome. In spite of all precautionary measures during anaesthetic management various other factors may be responsible for foetal loss.

## RECTAL FOREIGN BODY: A CASE REPORT

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*1Resident, 2Senior Professor, 3Senior Resident Department of General Surgery, RNT Medical College, Udaipur*

**Introduction:** Rectal foreign bodies often pose a challenging diagnostic and management dilemma that begins with the initial evaluation in the emergency department and continues through the post extraction period

**Material and method-** Here we are presenting a 35 years male patient who was under the influence of alcohol. Brought to the emergency room with abdominal distention, vomiting and per-rectal bleeding at MBGH Udaipur.

**Result:** After a complete assessment, manual extraction attempts transanally was done under spinal anesthesia.

**Conclusion:** Management of patient with rectal foreign bodies can be challenging and should be managed in well organized manner. The majority can be successfully managed conservatively, but surgical intervention is warranted in some of the cases. Patient with large objects, perforation and peritonitis requires laparotomy.



P 51

## STUDY OF ANTI-TPO ANTIBODY IN PATIENTS OF TYPE 1 DIABETES MELLITUS

**Dr Ramesh Kumar, Dr O P Meena, Dr Rajesh Meena,  
Dr Harish, Dr Deepa**

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**Introduction:** The association of type 1 diabetes mellitus with autoimmune thyroid disease has been documented in many populations. Appearance of Anti TPO antibodies precedes thyroid dysfunction and increases in autoimmune diseases like type 1 DM. The occurrence of thyroid auto antibodies against microsomes (AMA) and thyroglobulin (ATA). Screening for autoimmune thyroid disease by measuring TSH, anti-TPO antibodies has been recommended as a risk of developing future thyroid dysfunction and more frequently in female subjects. Thyroid dysfunction can affects metabolic control in type 1 DM.

**Aim & objectives:** To determine the frequency and titre of anti-TPO antibody in patient of type 1DM.

**Methods & materials:** This is prospective study carried at RNT medical college Udaipur and attached hospital. A total of 30 adult patients included. Serum autoantibodies testing (anti-TPO) by radioimmunoassay and TSH were estimated by enzyme immunoassay in anti-TPO Abs positive patients.

**Results:** 16 patients were female and 14 patients were male. Anti-TPO antibodies level was elevated in 5 patients. Out of 5 patients 3(60%) were female and 2(40%) patients were male. 3 out of 5 (60%) anti-TPO Abs positive patients has longer duration of type 1 DM. Patient having increases anti-TPO antibodies level has normal TSH level.

**Conclusion:** Age, sex, duration of disease suggested risk factor for the prevalence of anti-TPO antibodies in patient with type 1 DM during which subclinical thyroid dysfunction measured by serum TSH level.

## PULMONARY ARTERIOVENOUS MALFORMATIONS AT TERM PREGNANCY - RARE CASE REPORT

**Dr. Yaduvir Singh Meena\*, Dr. R.L. Meena#**

*\*Junior Resident, #Senior Professor, Department of Medicine,  
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Pulmonary arteriovenous malformations (PAVMs) are rare congenital anomalies resulting from the direct communication between pulmonary arteries and pulmonary veins without the interposition of a capillary bed with an increased risk of severe complications such as rupture, haemothorax, and hypovolemic shock.

We report a case of Complex type PAVMs with 34 week pregnancy presented with dyspnoea, cyanosis and underwent IUD.

CT Pulmonary angiography is gold standard for diagnosis.

PAVM in pregnancy is exceedingly rare. But when present they increase in size rapidly due to several physiological reasons.

Pulmonary arteriovenous malformations with haemoptysis need urgent management either by TCE or surgical resection, Trans catheter embolization may be reserved for poor risk surgical candidates.

**Keywords-** Pulmonary arteriovenous malformations, haemothorax, CT Pulmonary angiography, Trans catheter embolization

P 53

## LOWER RESPIRATORY TRACT INFECTIONS ( LRTI ); BACTERIOLOGICAL SPECTRUM AND ANTIBIOGRAM

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*Department Of Microbiology, Government Medical College, Kota, (Rajasthan)*

**Background:** Lower respiratory tract infection (LRTI) is one of the common major health problems in India causing morbidity and mortality.

**Aim & Objectives:** To identify common pathogens responsible for LRTI and to study their antibiogram in Government Medical College, Kota and associated hospitals(Rajasthan).

**Methodology:** The study was conducted in September and October 2019. Among total 120 respiratory samples collected, were sputum (111), pleural fluid (8) and tracheal aspirate (1) in sterile clean container. Standard protocol was followed to isolate and identify organisms which was followed by Kirby-Bauer disk diffusion method. Results were interpreted as per latest CLSI guidelines.

**Results:** Among 120 patient samples , 40 (33.33%) samples showed pure growth.bacterial isolates were Pseudomonas aeruginosa 12 (30%), Klebsiella pneumoniae 8 (20%), Escherichia coli 5 (12.5%), Acinetobacter Baumanii 3 (7.5%), Staphylococcus aureus 1 (2.5%).

**Conclusion:** This study emphasis that knowledge of the diversity of pathogens responsible for LRTIs and their susceptibility patterns to antibiotics, as well as antibiotic resistance surveillance. These findings are important in the effective management of LRTI with prompt clinical and laboratory diagnosis along with appropriate treatment strategies.

P 54

## CLINICAL MANAGEMENT OF SEVERE ACUTE RESPIRATORY INFECTION WHEN NOVEL CORONAVIRUS (2019-nCoV) INFECTION IS SUSPECTED

**Dr. Pooja Khundia<sup>1</sup>, Dr. R. L. Meena<sup>2</sup>,  
Dr. Neera Samar<sup>3</sup>, Dr. Manoj<sup>4</sup>**

*1,4Resident, 2Sr. Professor, 3Professor, Department of Medicine,  
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What is novel coronavirus (2019-nCoV) Δ Coronaviruses are a large and diverse family of viruses which includes the common cold, severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS).

**Aims:** To provide clinicians with updated interim guidance on timely, effective, and safe supportive management of patients with 2019-nCoV and SARI, particularly those with critical illness.

**Triage:** early recognition of patients with SARI associated with 2019-nCoV infection. Recognize and sort all patients with SARI at first point of contact with health care system (such as the emergency department). Consider 2019-nCoV as a possible etiology of SARI under certain conditions. Triage patients and start emergency treatments based on disease severity.

Clinical syndromes associated with 2019-nCoV infection: Uncomplicated illness, Mild pneumonia, Severe pneumonia, Acute respiratory distress syndrome, Sepsis, Septic shock.

Collection of specimens for laboratory diagnosis: WHO guidance on specimen collection, processing, and laboratory testing, including related biosafety procedures, is available.

- Collect blood cultures for bacteria that cause pneumonia and sepsis, ideally before antimicrobial therapy. DO NOT delay antimicrobial therapy to collect blood cultures.
- Collect specimens from BOTH the upper respiratory tract (URT; nasopharyngeal and oropharyngeal) AND lower respiratory tract (LRT; expectorated sputum, endotracheal aspirate, or bronchoalveolar lavage) for 2019-nCoV testing by RT-PCR. Clinicians may elect to collect only LRT samples when these are readily available (for example, in mechanically ventilated patients).
- Serology for diagnostic purposes is recommended only when RT-PCR is not available.
- Treatment: No specific anti-CoV treatment available for patients with suspected or confirmed infection.

P 55

## VITAMIN D DEFICIENCY IN PATIENTS OF DEPRESSION

**Dr Disha Gajjar, Dr. Asha Khubchandani**

*Department of Biochemistry, B.J. Medical College, Civil Hospital, Ahmedabad, Gujarat*

**Background :** Depression is the leading cause of disability worldwide, affecting about 121 million people. Deficiency of vitamin D has found to be an important nutritional risk factor for causation many neurodegenerative disorder, One of them is Depression. So, this study is conducted to check prevalence of vitamin D deficiency in depression.

**Aims :** To define association of vitamin D deficiency in patients of depression.

**Methodology:** Cross sectional study was conducted among 50 patients of depression in civil hospital Ahmedabad. After taking informed consent patient underwent history recording and blood collection. Laboratory investigations of Vitamin D was done by chemiluminescent Micro Particle Immunoassay.

**Results:** Study was conducted of 50 male patients, with mean age of 40 +/- 15 years. Vitamin D deficiency was observed in 91% of depressive patients. Which is 28% lower than the average deficient level found in healthy population.

**Conclusion:** Present study showed high prevalence of Vitamin D deficiency in patients of depression. Hence all the treating psychiatrist should anticipate the deficiency of Vitamin D in such patients and take appropriate measures in patients's care.

## PRIMARY HYDATID CYST IN AXILLARY REGION

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**Introduction** - Human hydatid disease is a parasitic infection caused by the larval form of *Echinococcus granulosus*, where humans are occasional intermediate hosts

**Materials and Methods** : A 20 years old female presented to our hospital with complaints of swelling in left axilla of 2 months duration. She had no history of breast mass, fever, swelling elsewhere in body or previous history of hydatid cyst.

**Result**- Surgical resection is done. with albendazole 10mg/kg/day for atleast two weeks preoperatively and this is continued postoperatively for four weeks.

**Conclusion**- Hydatid disease is a widespread public health problem in developing countries especially in endemic regions, therefore it should be considered in the differential diagnosis of a palpable mass in the axillary region.



P 57

## **DIFFICULT AIRWAY MANAGEMENT FOLLOWING REPEATED SURGERY FOR HEAD & NECK MALIGNANCY: A CASE REPORT**

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Dr. Alka Chhabra, Sunanda Gupta**

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The number of cases of recurrent oral cancers are on the rise. As these patients usually present with multiple rounds of chemo/brachytherapy when posted for Commando Surgery, establishing, maintaining and protecting an airway in the face of abnormal anatomy due to tumour, fibrosis and oedema from simultaneous surgical intervention can be challenging. Patients exposed to radiation as the primary modality of therapy for oral cancer are likely to have limited neck movements and extension difficulties with restricted mouth opening due to extensive postradiation fibrosis. These are factors that compound the difficulty associated with the cancerous growth itself, which can create an impediment to access in terms of altered anatomy, increased tendency to bleed thereby occluding the visual field and increased friability of the tissue as a result of cancerous growths.

Here we present a case report on difficult intubation of a 61 years old male patient with history of recurrent oral cancer. The patient had previously undergone multiple rounds of Interstitial Brachytherapy and Commando Surgery and had refused tracheostomy to establish a patent airway. It was managed successfully with awake fibre-optic intubation in spite of distorted anatomy of airway.

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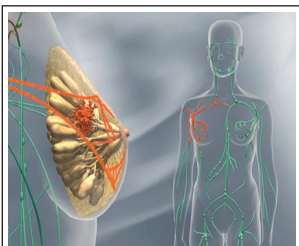
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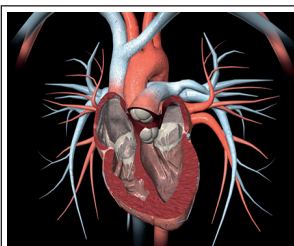


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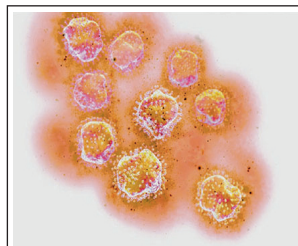
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