



## From the Editor's Desk ...

“Do not correct a fool, or he will hate you. Correct a wise man and he will appreciate you “

Dear readers,

Greetings!

Welcome to second issue of IJOGR ...and world of academics... Volume 9, Issue 2, April – June 2022

Indian journal of obstetrics and gynecological research is an attempt to give pen to researchers, academicians, and residents to give words to their thoughts....

We have tried to accommodate from research article to case study- a whole bunch of bouquet.

Here in this issue, we have ...

Review and Original Research Article form all over India as well as international....

## Original Research Article

Gestational diabetes mellitus (GDM) is becoming more common all over the world, mainly to an increase in maternal obesity. There have been a number of approaches to screening for and diagnosing GDM described, however there is no consensus on which methods are the most effective. For the mother, developing fetus, and children born to mothers with GDM, GDM poses severe short and long-term health hazards. Macrosomia, shoulder dystocia, delivery trauma, and hypoglycemia in the immediate postpartum period are all short-term dangers for the fetus. Increased rates of childhood and adulthood obesity, as well as a higher cardio metabolic risk, are long-term hazards for offspring born to women with GDM. More investigations on the etiology and underlying mechanisms of gestational diabetes and its complications on the long-term health of offspring are needed to offer a foundation for creating effective therapies during this important period with the goal of promoting lifelong health and wellbeing.

A clinical update on the molecular pathogenesis of gestational diabetes mellitus and its consequence by Balaji Vijayam et al from Dept. of Diabetology, Dept. of Medicine, Saveetha Institute of Technical and Medical Sciences, Chennai, Tamil Nadu, India and Dept. of Medical Research, Dr. V Balaji Diabetes Care and Research Institute, Chennai, Tamil Nadu, India

Iron deficiency (ID) and iron deficiency anaemia (IDA) are usually anticipated to occur during and after pregnancy. Peri-menopausal women are at risk of ID/IDA & warrant attention as the symptoms of ID can be misinterpreted or overlooked. Scientific literatures convey iron deficiency to be considered as a major health problem for perimenopausal women. However, Indian evidence on ‘Iron deficiency in peri-menopausal women’ is scarce.

Iron deficiency in peri-menopausal women: Clinical considerations from an expert Consensus by Alpesh Gandhi, Suchitra Pandit, Jaideep Malhotra, Madhuri Joshi Janaki Desai, Parag Biniwale, Vaishali Deshmukh, Shiva Singh Shekhawat, Mamata Sarmah, Vinod Malve, Sachin Pawar from Arihant's Women Hospital, Ahmedabad, Gujarat, India, Surya Group of



Hospital's, Mumbai, Maharashtra, India, ART Rainbow IVF, Jaipur, Rajasthan, India, Group of Multi-Specialty Hospitals, Mumbai, Maharashtra, India, Revive Women's Clinic, Ahmedabad, Gujarat, India, Biniwale Clinic, Pune, Maharashtra, India, Deenanath Mangeshkar Hospital and Research Center, Pune, Maharashtra, India, Apollo Women's Hospital, Tamil Nadu, India, Group of Multi-Specialty Hospitals, Guwahati, Assam, India And Procter & Gamble Health Limited, Mumbai, Maharashtra, India

To evaluate efficacy and safety of the Fotona<sup>R</sup> device Smooth device in treatment of SUI (stress urinary incontinence) patients after treating them with Er: YAG laser using both objective and patient-reported outcomes.

Stress urinary incontinence (SUI) is a leakage of urine during moments of physical activity that increases abdominal pressure, such as coughing, sneezing, laughing, or exercise. It is most common seen health problem among women of certain age and it is most common type of urinary incontinence in women. Here, SUI is treated using intravaginal laser therapy by using non ablative Er: YAG (erbium-doped yttrium aluminium garnet) laser with SMOOTH mode technology.

Non-ablative Er:YAG laser treatment for stress urinary incontinence (SUI) by Vidya Pancholiya & Manish R Pandya et al from Vcare Laser Centre State of Art Centre for Cosmetic Gynecology, Indore, Madhya Pradesh, and Dept. of Obstetrics & Gynecology, Scientific Research Institute, Surendranagar, Gujarat, India

Polycystic ovary syndrome (PCOS) is the most common endocrine and metabolic disorder of reproductive age characterized by anovulatory infertility and diagnosed by Rotterdam criteria. The International evidence-based guidelines for PCOS, confirms that raised levels of anti-Müllerian hormone (AMH) in patients with PCOS but lack of cutoff values in different age groups is limited. Hence the present study was aimed to determine a cutoff value of AMH in different age groups that could facilitate potential diagnostic marker of PCOS Chennai, India.

Age specific references for anti-mullerian hormone and use as a potential diagnostic marker of PCOS in an Indian population by Abinaya Vijayan et al from Institute of Reproductive Medicine, Madras Medical Mission, Chennai, Tamil Nadu, India

Liver illness in pregnancy can manifest as a pregnancy- specific disorder or as an acute or chronic liver disease that occurs concurrently with pregnancy. Hyperemesis gravidarum, preeclampsia/eclampsia, the syndrome of haemolysis, elevated liver enzymes, and low platelets (HELLP), intrahepatic cholestasis of pregnancy, and acute fatty liver of pregnancy are all hepatic disorders that are peculiar to pregnancy. Viral hepatitis, autoimmune hepatitis, non-alcoholic fatty liver disease, and cirrhosis are examples of acute and chronic primary hepatic diseases encountered in pregnancy. Acute fatty liver of pregnancy (AFLP), HELLP (Haemolysis, elevated liver enzymes, low platelets) syndrome, and pre-eclamptic liver dysfunction are among the conditions that might have a negative impact on the mother and foetus. Majority of the time AFLP is misdiagnosed. Pregnancy-related liver disorders are the most common cause of liver dysfunction in pregnant women, affecting up to 3% of them. As there is a need to consider both maternal and foetal health, for the application of diagnostic techniques and pharmacologic therapy for liver disease that develops during pregnancy, there are unique considerations. The COVID- 19 pandemic has a significant impact on the body's numerous systems.

Nocuous liver diseases in pregnancies during the COVID pandemic by Pentakota Venkata Gowri Priyanka et al from Dept. of Obstetrics and Gynecology, Gandhi Hospital, Secunderabad, Telangana, India

The delivery of an alert and active baby into the arms of a conscious and pain free mother is one of the most exciting and rewarding experiences in medicine. Epidural analgesia is considered one of the most effective methods for pain relief during labor, and the intrapartum use of epidural analgesia has substantially increased over the previous two decades.

Epidural analgesia-efficacy and feto-maternal outcome: A cross sectional study by Mane Swapnil et al from Dr. Mane Medical Foundation and Research Center & SAIDHAM Cancer Hospital, Rahuri, Maharashtra, India Dept. of Community Medicine, Dr. Balasaheb Vikhe Patil Rural Medical College, PIMS-DU, Loni, Maharashtra, India

The coronavirus disease 2019 (COVID-19) pandemic has primarily affected adults of higher age groups, and the effect of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) appears to be less severe in infants and neonates. This study aims to evaluate the clinical manifestations, management, and short-term outcomes of SARS-CoV-2 neonates born to mothers with COVID-19 in a tertiary care hospital in Telangana, India.

Birth outcomes for infants born to mothers with COVID-19 at a tertiary care hospital in Telangana by Hima Bindu Ananthula et al from Dept. of Obstetrics and Gynaecology, Kaloji Narayana Rao University of Health Sciences, Warangal, Telangana, India

Corona virus outbreak emerged in Wuhan in late December 2019. It was declared as pandemic by WHO in March 2020. Patients usually present with fever cold, cough and fatigue. The severity of the disease varies from moderate to severe, with the majority of cases being mild. Fatality was high in immuno-compromised patients. Pregnancy is considered to be an immunosuppressive state, so pregnant women were also at risk of acquiring COVID-19 infection. According to the literature, COVID-19 infection during pregnancy may cause fetal discomfort, preterm labour, miscarriage, or neonatal death.

Intrauterine deaths in pregnancies with COVID-19 infection by Kandukuri Malavika et al from Dept. of Obstetrics and Gynaecology, Gandhi Medical College and Hospital, Secunderabad, Telangana, India

Menopause is the period in women's life when menstruation ceases for at least 12 months. Perimenopause refers to the time during which body makes the natural transition to menopause. Majority women attain menopause without having adequate knowledge and approaches to cope with the menopausal changes. So, they face many physical and psychological disorders during their menopause. So knowledge and awareness regarding it is very necessary.

Knowledge, attitude and perception of perimenopausal and menopausal changes in middle age women (40-45 years) of urban population by Sayali P Banole et al from Bachelors of Physiotherapy, Dept. of Cardio-respiratory Physiotherapy, Sancheti Institute College of Physiotherapy, Pune, Maharashtra, India

Induction of labour is defined as the process of artificially stimulating the uterus to start labour. Mifepristone is a synthetic steroid hormone analogue that has both antiprogesterone and antiglucocorticoid activities. It increases the sensitivity of the uterus to prostaglandins and facilitates labour. Dinoprostone, is a naturally occurring prostaglandin that is involved in promoting labour. The aim of this study was to compare the safety and efficacy of oral mifepristone with dinoprostone gel in induction of labour in primigravidas.

A prospective study to compare oral mifepristone and dinoprostone gel in induction of labour in primigravida Gomathy et al from Dept. of Obstetrics and by Gynecology, Sri Devraj Uri Medical College, Kolar, Karnataka, India

PCOS is the most common endocrinopathy affecting reproductive age women with prevalence of 6-10%. It's a heterogeneous disorder characterised by obesity, insulin resistance, adverse lipid profile and hyperandrogenism. Important reproductive aspects associated with PCOS are polycystic ovaries, anovulation leading to oligomenorrhea or amenorrhea. Metabolic disorders include hyperinsulinemia, insulin resistance impaired pancreatic cell insulin secretion, increased risk of type 2 diabetes mellitus and hypertension. It's also frequently associated with increased risk of depression, anxiety, endometrial carcinoma.

Effect of vitamin D supplementation on serum VEGF levels in vitamin d deficient polycystic ovarian syndrome patients by Surbhi Suman et al from University College of Medical Sciences, Delhi, India

Colposcopy is an outpatient procedure that involves visualization of the cervix, vagina and vulva using a magnifying optical instrument called the colposcope. Human Immunodeficiency Virus infection is associated with increased incidence of cervical malignancies which can be detected by colposcopy.

Colposcopic findings in human immunodeficiency virus positive patients in port Harcourt by Sapira-Ordu Leesi et al from Dept. of Obstetrics and Gynaecology, Rivers State University Teaching Hospital,, Port Harcourt, Nigeria, Dept. of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria, Dept. of Urology, University of

Port Harcourt Teaching Hospital, Port Harcourt, Nigeria, Dept. of Biostatistics and Population, College of Medical Sciences, Rivers State University, Nigeria

Oligohydramnios is considered as a potential sign of fetal compromise and is associated with increased perinatal morbidity and mortality. Amniotic fluid is needed for maintaining fetal well-being; therefore, oligohydramnios can impact on outcome of pregnancy. It is universally accepted now that an adequate amniotic fluid volume is an essential requirement for apposite intrauterine development and better outcome during neonatal phase. Amniotic fluid helps in development of fetal lungs, musculoskeletal and gastrointestinal systems normally and prevents umbilical cord compression. The liquor amnii rises from 25ml at 10 weeks to around 400- 500ml at 20 weeks. This volume increases at 28 weeks to approximately 800-1000ml. Liquor amnii plateaus at around term and decreases further to reach 400ml at 42 weeks.

Effect of maternal oral hydration in oligohydramnios Salomi Singh et al from Dept. of Obstetrics & Gynecology, MGM Medical College and Institute of Health Sciences, Navi Mumbai, Maharashtra, India

Spectrum of lesions occur on the vulvar/vaginal regions ranging from non-neoplastic to precursor lesions to malignancy, however, these lesions presents with non-specific symptoms due to which they get unnoticed and progress. An early histopathologic examination is of paramount importance for a rapid diagnosis and initiation of treatment. Thus this study was done to study the clinicopathological spectrum of vulval and vaginal lesions with an emphasis on precursor and malignant lesions.

A clinicopathological spectrum of vulvar and vaginal lesions in a tertiary health care centre in North India: A five-year experience by Bushra Siddique et al from Dept. of Pathology, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, Uttar Pradesh, India

The pregnancy increases the possibility of the case progressing from asymptomatic bacteriuria (ABU) to urinary tract infection (UTI) with symptoms, which may further lead to pyelonephritis and obstetric outcomes. The adverse outcome may result in premature delivery, low weight at birth, and increased foetal mortality. The present study was proposed to assess the occurrence of Symptomatic UTI and asymptomatic bacteriuria, the microorganisms causing UTI in pregnancy, to assess the socio- demographic characteristics involving the risk factors of UTI and the maternal outcome.

Occurrence of urinary tract infection and asymptomatic bacteriuria during pregnancy and its association with maternal outcome by Pavani M et al from Dept. of Obstetrics & Gynaecology, Shyam Shah Medical College, Rewa, Madhya Pradesh, India, Dept. of Reproductive Medicine & Surgery, Kasturba Medical College, Manipal, Karnataka, India, Dept. of Obstetrics & Gynaecology, RVM Institute of Medical Sciences, Siddipat, Telangana, India, Dept. of Obstetrics & Gynaecology, Dept. of Microbiology, Navodaya Medical College, Raichur, Karnataka, India

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is associated with neurological symptoms in one third of COVID-19 patients which is attributed to its hypercoagulable state or its neurotropism which is not yet defined. PRES (Posterior Reversible Encephalopathy Syndrome) is a rare clinico-neuro-radiological entity which can be associated with multiple clinical conditions and was observed frequently with preeclampsia and eclampsia patients. Neuro-imaging is important to diagnose PRES.

A prospective observational study on posterior reversible encephalopathy syndrome in COVID-19 eclampsia patients in tertiary care hospital by Saikam Bhargavi et al from Dept. of Obstetrics & Gynaecology, Gandhi Medical College, KNRUHS, Secunderabad, Telangana, India

Abnormal Menstrual Bleeding (AMB) is a common gynaecological complaint. AMB has been studied pathologically and anatomically but in recent years, its effects on various aspects of women's life has been emphasized. AMB has an effect on women's quality of life (QoL) and it varies woman to woman. Hence it is necessary to know different views of women regarding AMB to provide them with proper care and guidance.

Evaluation of knowledge, attitude, and behaviour of women towards abnormal menstrual bleeding and its impact on quality of life of women in tribal region of central India by Vedashree Joshi et al from *Dept. of Obstetrics and Gynecology, Government Medical College, Gondia, Maharashtra, India*

Caesarean section is the most common obstetric surgical procedure, with more than one-third of pregnant women having lower-segment Caesarean section. Emerging evidence suggests that omitting the use of urinary catheters during and after Caesarean section could reduce the associated increased risk of urinary tract infections urethral pain, voiding difficulties after removal of the catheter, delayed ambulation, and increased hospital stay. Immediate removal of urinary catheter after elective cesarean section is associated with lower risk of urinary infection and earlier postoperative ambulation. With respect to these known facts we have undertaken study to explore further effects of catheter in situ in postoperative period after caesarean section. So, objectives of this study were to assess the effect of duration of catheterization on urine analysis and on first voiding time after removal of catheter in postoperative period after caesarean section.

Post catheterization urine analysis in lower-segment caesarean section patients by Gayathri Devi et al from *Dept. of Obstetrics and Gynecology, Dr. D. Y. Patil Medical College, Hospital & Research Centre, Kolhapur, Maharashtra, India and Justice K S Hegde Charitable Hospital, Mangalore, Karnataka, India*

Post Partum Hemorrhage [PPH] is responsible for 47% of maternal mortality in India and one quarter of maternal deaths globally. Lack of expertise, lack of proper cold chain for oxytocin and cost limitations of heat stable carbetocin are major hurdles to prevent PPH. Restrained options for safer uterotonics in heart disease complicating pregnancy are a major concern.

Carbetocin, the front runner for post partum haemorrhage in heart disease complicating pregnancy at Gandhi hospital by Amreen Sharif et al from *Dept. of Obstetrics and Gynaecology, Gandhi Medical College, Secunderabad, Telangana, India*

Polycystic ovary syndrome (PCOS) is the most common endocrinological problem and is the cause of irregular menstruation in the women of reproductive age. The present study was undertaken to find out novel inflammatory markers in polycystic ovary syndrome (PCOS). Study population was divided into two groups controls (n=100) and cases (n=100) diagnosed with PCOS were recruited for the study. The anthropometric data such as Height, Weight, BMI and, hormonal profile LH, FSH, LH/FSH ratio, Thyroid profile, Testosterone, HOMA-IR, Lipid profile, Monocytes, Neutrophils were noted for all the participants. Taking BMI  $25 \text{ kg/m}^2$  as the boundary, the control group was divided into Group A and Group B. Group A includes 53 subjects which is normal BMI group and Group B includes 47 subjects in the High-BMI group and among the cases Group C and Group D. Group C consists of 67 cases (normal BMI group) and 33 cases in the Group D (high BMI group). It is observed that monocyte HDL ratio (M/HDL ratio) and Neutrophil lymphocyte ratio (N/L ratio) in PCOS case group increased significantly ( $P < 0.05$ ) when compared to control group. Through the analysis of differences between the subgroups along with LH, LH/FSH, Total Testosterone, M/HDL ratio, and N/L ratio can be considered as specific indicators of PCOS disease. Through correlation analysis, M/HDL ratio and N/L ratio showed association with hormone levels of LH and Total Testosterone respectively. Through ROC curve, it is found that M/HDL ratio is  $>10.139$  or N/L ratio is  $>1.7$  had diagnostic value for PCOS, and the combined diagnostic value of the two was higher. From the observation of this study, it can be concluded that M/HDL ratio and N/L ratio are not chronic inflammatory indicators caused by obesity but caused by the PCOS disease itself. Therefore, M/HDL ratio and N/L ratio can be used as diagnostic markers for PCOS.

Monocyte high density lipoprotein ratio and neutrophil lymphocyte ratio a novel marker in polycystic ovary syndrome by Arthi G et al from *Dept. of Obstetrics and Gynecology, Karpaga Vinayaga Institute of Medical Sciences and Research Centre, Madhuranthagam, Tamil Nadu, India*

Cervical incompetence is the inability of cervix to support a full term pregnancy. The patient presents with a partially dilated cervix, with or without a history of recurrent mid trimester losses or preterm births. It is believed that the forced mechanical closure of an 'incompetent' cervix with a suture maintains the cervical length, thus preventing preterm labor.

Effectiveness of cervical encirclage and its perinatal outcome-a cohort study by Indu M Madhu et al from *Dept. of Obstetrics & Gynaecology, Amala Institute of Medical Sciences, Thrissur, Kerala, India*

***We have case reports are.....***

1. A giant ovarian tumor in perimenopausal women: A case report and review of Literature by Anju Kumari Rani et al from Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, Uttar Pradesh, India
2. Caesarean scar endometriosis: A case report by Vidisha Khanna et al from Dept. of Obstetrics and Gynaecology, Dept. of General Surgery, Military Hospital, Jabalpur, Madhya Pradesh, India
3. Ascites in preeclampsia: A case report by Sharmeen Vazifdar et al from Dept. of Obstetrics and Genecology, Dr Vithalrao Vikhe Patil Foundations Medical College, Ahmednagar, Maharashtra, India
4. Acute colonic pseudo-obstruction after caesarean, an obstetrician nightmare by Akshaya AVK et al from Dept. of Obstetrics and Gynecology, CSI Kalyani Hospital, Chennai, Tamil Nadu, India
5. Choriangioma of placenta – A rare case report By Nilufer Moideen et al from *Dept. of Obstetrics and Gynecology, Grant Government Medical College And JJ Group of Hospitals, Mumbai, Maharashtra, India*
6. A rare case report of anterior vaginal wall cyst by J Jayasree et al from Dept. of Obstetrics and Gynaecology, Shri B.M. Patil Medical College, BLDE (DU), Vijayapura, Karnataka, India
7. Extreme obesity in pregnancy: A case report with references to the risks and the Management by Aruna Tantia et al from Dept. of Obstetrics and Gynaecology, ILS Hospitals, Kolkata, West Bengal, India
8. A rare case of cervical ectopic pregnancy by Manish Pandya et al from scientific research institute Surendranagr Gujarat India

We try to sieve all articles by expert, peer reviewers to get best of best and new article for readers.

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Individually we achieve, together we excel...

Regards

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