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Indian Journal of Obstetrics and Gynecology

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### From the Editor's Desk ...

“Success is the Best Revenge”

Dear readers,

Greetings!



Welcome to third issue of IJOGR ...and world of academics... Volume 10, Issue 4, October-December 2023

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 from all over India as well as international....

### Review Article.....

Loss of normal ovarian function before the age of 40 characterizes primary ovarian insufficiency (POI), sometimes called premature ovarian failure or early menopause. Many women all around the globe deal with this serious reproductive health issue. The purpose of this study is to provide a broad perspective on how to identify and treat primary ovarian insufficiency. Clinical symptoms, hormone profiles, and ovarian imaging all play a role in making a diagnosis of POI. Genetic predisposition, autoimmune disease, and medical intervention are all possible origins. Counseling and treatment techniques for afflicted women can only be used when a timely and correct diagnosis has been made. Hormone replacement treatment (HRT) for symptom alleviation, avoidance of long-term consequences including osteoporosis and cardiovascular disease, and preservation of fertility are all part of the management of postmenopausal irritability (POI).

This review article covers primary ovarian insufficiency diagnosis and treatment. Affected women should be diagnosed early, counselled, and treated individually. Understanding POI and developing better drugs may improve these people's reproductive and general health.

Primary ovarian insufficiency- An overview: Part 2 diagnosis and management by Rana Mondal by Dept. of Reproductive Medicine, Bansal Hospital, Bhopal, Madhya Pradesh, India, Dept. of Obstetrics and Gynaecology and The Lady Dufferin Hospital, Kolkata, West Bengal, India Dept. of Obstetrics and Gynaecology, Nil Ratan Sircar Medical College, Kolkata, West Bengal, India.

## Original Research Article...

Pain management during labour is an essential part of good obstetric care. Though this severe pain during labour is not life-threatening, it can have physiological and neuropsychological consequences. Adequate analgesia during labour is a benefit for the mother, has a positive influence on the course of labour and the state of the new born child. The ideal analgesic in obstetrics should have potent opiate-like analgesic efficacy with minimal side effects. Tramadol can be used as a basic analgesic for the treatment of patients with moderate to severe pain. Parenteral tramadol during labour was proven to have no negative effects on the baby or the process of labour.

Tramadol – A wonder drug in women with labour pain By Janaki Vellanki et al from Dept. of Obstetrics & Gynaecology, KNR University of Health Sciences, Warangal, Telangana, India.

Recent advances in molecular genetic techniques have found evidence of the role of genetic factors in the development of CHD. Approximately 30% of CHD is thought to be related to genetic syndromes accompanied by extra-cardiac anomalies. We describe the cases of cardiac anomalies detected on prenatal ultrasound, which helped us in suspecting the genetic abnormality in fetus which were later confirmed by definitive testing.

Menstrual cups are a better alternative for menstrual hygiene but usage among girls and women is limited due to lack of popularity. The purpose of this study is to assess the usage of menstrual cup and its determinants among young women in health profession. Assess the usage pattern of menstrual cups and its determinants among young health professionals at a tertiary hospital in Puducherry by Tamilarasi S et al from Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India.

To determine whether the antenatal assessment of CSA of umbilical cord variables is different in PIH compared with healthy pregnant women by using ultrasonography and to assess its relationship with gestational age.

Umbilical cord variables in relation to gestational age by using ultrasonography in normal pregnancy and PIH women by Khizer Hussain Afroze M et al from Dept. of Anatomy, MVJ Medical College & Research Hospital, Bangalore, Karnataka, India.

Early detection of abnormal progress of labour and prevention of prolonged labour significantly improves pregnancy outcomes. Partograph is a simple and important tool which can provide a continuous pictorial overview of labour on a single sheet of paper and is essential to monitor labour. Aims and objectives: (1) To study the progress of labour using WHO modified partograph in terms of alert line and action line and using paperless partograph in terms of alert and action estimated time of delivery and detect any deviation from normal progress of labour. (2) To evaluate the duration of labour, mode of delivery and perinatal outcome in both the groups.

To study the clinical utility of WHO modified and paperless partograph in the management of labour and its outcome by Subha Bansal et al from Dept. of Obstetrics and Gynaecology and Dept. of Paediatrics, Christian Medical College & Hospital, Ludhiana, Punjab, India.

Effective menstrual hygiene is vital to the health, wellbeing, dignity, empowerment, mobility and Productivity of girls and women. The inadequate knowledge and improper practice of menstrual hygiene among various age group of girls and women may affect their reproductive health. A descriptive study was carried out with the objectives to assess the knowledge and practice on menstrual hygiene and to assess the significant association between selected Demographic variables with knowledge and practice among the girl students of Balika Vidya Mandir School, Digboi, Tinsukia, Assam. Materials and Methods: The study was conducted in Balika Vidya Mandir School, Digboi, Tinsukia, Assam, among 60 girl students selected by simple random sampling technique. A self structured questionnaire and a checklist was used to assess the knowledge and practice on menstrual hygiene. Both descriptive and inferential statistics were used to find out the result of the study.

Knowledge and practice on menstrual hygiene among girl students of Balika Vidya Mandir School, Digboi, Tinsukia, Assam by Aparajita Phukan Baruah et al from m Dept. of Obstetrics and Gynecology, Srimanta Sankaradeva University of Health Sciences, Guwahati, Assam, India.

The baby is delivered via incisions made in the mother's abdomen and uterus during a Caesarean delivery, sometimes known as a C-section. Whether medically necessary or elective, caesarean sections have increased sharply in recent decades all throughout the world, exceeding the WHO-recommended 10-15% rate. Every effort should be taken to give cesarean sections to women in need rather than aiming to achieve a target rate, according to a 2015 WHO statement. Therefore, we must investigate the strategies that can improve CD's maternal and neonatal health condition. This study compares the outcomes for the mother and the newborn in the vacuum-assisted CD and manual CD groups. A progressive study was conducted at Lucknow's Green cross Hospital between June 2012 and April 2018. 500 pregnant ladies took part in this study as participants. This research was approved by the institutional human ethical committee. 250 caesarean sections were performed as part of this cohort study, each with vacuum assistance utilizing a soft cup vacuum extractor on the fetal scalp and manual removal of the skull as usual with fundal compression as support. Due to the absence of uterine activity and amniotic fluid, all of the patients underwent preplanned caesarean sections. The study's findings showed that manual extraction Caesarean birth is inferior to vacuum-assisted Caesarean delivery. Additionally, it was noted that Vacuum Assisted Caesarean Delivery resulted in less uterine incision extension, estimated blood loss, and maternal discomfort. There was no difference between Vacuum and Manual Extraction caesarean deliveries in terms of Apgar score, the requirement for infant resuscitation, or admission to the NICU.

Vacuum-assisted caesarean delivery assessment of maternal & fetal outcome by Manisha Agarwal et al from Dept. of Obstetrics and Gynaecology, Hind Institute of Medical Sciences, Sitapur, Uttar Pradesh, India.

Methicillin resistant *staphylococcus aureus* (MRSA) screening is a routine practice at many hospitals for high-risk patients. However, its incidence and clinical significance in expectant mothers are poorly understood. Hence, the purpose of the current study was to look at MRSA colonization rates in our obstetric population.

Material and Methods: Prospective study was conducted for three months from December 2019 to February 2020. MRSA screening samples from pregnant women at 32-34<sup>th</sup> weeks of gestation were collected after informed consent. All screening samples underwent standard microbiological analysis. Women who tested positive for MRSA received a decolonization program and their care was monitored.

Prevalence of methicillin resistant *staphylococcus aureus* (MRSA) colonization in pregnant females visiting at tertiary care hospital in Northern Mumbai by Kinjal Patel et al from Dept. of Microbiology, Apoorva Diagnostics & Health Care, Dept. of

Obstetrics & Gynecology and Dept. of Infection Control Nurse, Bhaktivedanta Hospital & Research Institute, Mira Bhayandar, Maharashtra, India.

Abnormal uterine bleeding (AUB) refers to bleeding that occurs outside of normal menstrual cycles and includes changes in the regularity, frequency, duration, or amount of bleeding during or between periods. AUB is a condition that causes significant impairment in women's health, impacting a substantial proportion of women in different stages of their reproductive life with 14-25% of women of reproductive age and up to 50% of women in the perimenopausal phase experience the effects of this condition.

An analytical study of hysteroscopic evaluation in patients with abnormal uterine bleeding, and its correlation with histopathology by Twinkle et al from Dept. of Obstetrics and Gynaecology, Integral Institute of Medical Science and Research, Lucknow, Uttar Pradesh, India.

Obstetric haemorrhage is the leading cause of maternal mortality and morbidity worldwide. Materials and Methods: A prospective observational study was conducted among 132 women admitted, booked/referred, at tertiary care centre with Obstetric Haemorrhage for 2 years period. Of these 71 patients had received Non-pneumatic antishock garment and / or Uterine Balloon Tamponade (Group 1) and 61 didn't receive any (Group2). Both groups were observed for its outcome.

Non-pneumatic anti-shock garment (NASG) and balloon tamponade decrease maternal mortality and morbidity from Obstetrics Haemorrhage: A prospective observational study by Ashish Zarariya et al from Dept. of Obstetrics and Gynaecology, Government Medical College, Nagpur, Maharashtra, India.

Preeclampsia is one of the most common disorders of pregnancy known to complicate 5-10% of all the pregnancies, and it is a component of the deadly triad (along with haemorrhage and infection), that contributes greatly to maternal morbidity and mortality rates. (1-3). The prevalence of preeclampsia in twin pregnancy is 3-4 fold compared to singleton pregnancy. Timely diagnosis and prevention of this condition is therefore critical. Multiple maternal factors and placental biomarkers have shown to predict preeclampsia in singleton pregnancies. Previous Studies have shown that the proposed algorithms for preeclampsia screening in singletons can also be applied in twins, but with slight modifications and lower accuracy.

A comparative study of performance of first trimester FMF algorithm for prediction of preeclampsia in singleton and twin pregnancies in coastal Karnataka by Sonam Agarwal et al from Dept. of Obstetrics and Gynaecology, Kasturba Medical College, Manipal Academy of Higher Education, Manipal, Karnataka, India.

To assess the role of extended first trimester screening (EFTS) in early detection and management of preeclampsia.

Role of extended first trimester screening (EFTS) in screening of aneuploidy and prediction of pre-eclampsia by Anima Anjani et al from Dept. of Obstetrics and Gynaecology, Department of Obstetrics and Gynaecology, Command Hospital (CC), Department of Obstetrics and Gynaecology, Command Hospital (CC), Lucknow, Uttar Pradesh, India and INHS Asvini, Mumbai, Maharashtra, India.

Gestational diabetes mellitus (GDM) and impaired glucose tolerance (IGT), which are growing health concerns globally, are the most common metabolic and endocrine perinatal issues. It is a contentious entity with competing policies and procedures. Most physicians in the United States employ a two-step procedure, starting with a 50-g non-fasting oral glucose challenge test at 24 to 28 weeks and moving on to a 100-g fasting test for women who receive a positive screening result. Instead, doctors

use the Diabetes in Pregnancy Study Group India (DIPSI) technique and conduct just a 75-g, two-hour fasting oral glucose tolerance test.

A comparison study of maternal and perinatal outcomes with gestational diabetes mellitus, impaired glucose tolerance, and normal glucose tolerance by Balaji Vijayam et al from Dept. of Diabetology, Dr. V Balaji Diabetes Care and Research Institute, Chennai, Dept. of Obstetrics and Gynecology, Government Thiruvannamalai Medical College & Hospital, Tiruvannamalai, Dept. of Obstetrics and Gynecology, Madras Medical College & Hospital, Chennai, Dept. of Diabetology, Government Kilpauk Medical College & Hospital, Chennai, and Dept. of Diabetology, Dr. V Balaji Diabetes Care and Research Institute, Chennai, Tamil Nadu, India.

People who did not conceive after one year of marital life with regular unprotected intercourse is defined as infertility. 85–90% of young couples conceive within one year. Progesterone, stimulate the growth of blood vessels that supply the endometrium, helps to secrete nutrients to grow early embryo. PPOS (progesterone primed ovarian stimulation) prevent activation and transmission of Estradiol (E2)-induced LH surges and serves as an alternative to conventional treatment with GnRH analogues. Ovarian stimulation leads to progesterone deficiency so Luteal phase support is routinely performed during infertility. Use of progestogens in infertility was associated with increased in the live birth rate, a systematic review demonstrated this. Oral progesterone associated with low bioavailability with (due to first pass metabolism) side effects, such as nausea, vomiting, lack of sleep, etc.

Dydrogesterone is a endogenous progesterone with similar molecular structure and pharmacological effects, dydrogesterone is more potent than natural progesterone, with a higher affinity to progesterone receptor than progesterone.

Dydrogesterone has more bioavailability than progesterone. 8 Dydrogesterone down regulates cytokines that are detrimental to pregnancy has been proposed and helps in healthy pregnancy; Dydrogesterone shifts Th1 or pro-inflammatory bias towards a Th2 or anti-inflammatory bias, it is an immune-modulator and studies showed that dydrogesterone supplementation is helpful. But it is marginally expensive than other competitive molecules.

Marvel drug for infertility!! By Janaki Vellanki et al from Dept. of Obstetrics and Gynecology, KNR University of Health Sciences, Warangal, Telangana, India.

Preterm labour is the leading cause of perinatal morbidity and mortality worldwide. Preterm birth accounts for 75% of neonatal deaths and 50% of long-term morbidity including respiratory disease and neuro-developmental impairment. The use of tocolysis in women in preterm labour aims to inhibit uterine contractions and reduce perinatal morbidity and mortality associated with early delivery.

Nifedipine versus magnesium sulfate in the management of preterm labour- A randomised controlled trial by Shalini Bhat B et al from Athreya Hospital and Scanning Centre, Chincholi, Dept. of Obstetrics and Gynaecology, SDM Research Institute for Biomedical Sciences Shri Dharmasthala Manjunatheshwara University, Dharwad, Karnataka, India.

Maternal antibodies are a vital component of neonatal immunity. These antibodies give the baby a head start in building their immune system and fighting off diseases. The study was carried out to check the presence of IgG antibodies in cord blood of a completely vaccinated mother with Covishield and to find out if any side effects occurred during their vaccination. It was clear

from the study that all the cord blood samples showed presence of antibodies and only limited side effects were observed in the vaccinated mothers.

A stockpile of neonatal antibodies pertaining to SARS Covid (COVID 19) ascertained in cord blood after complete vaccination of covishield in mother- An observational study by Abhishek S Krishna et al from Dept. of Pharmacy Practice, Ezhuthachan College of Pharmaceutical Sciences, Trivandrum, Kerala, India.

AntiD is a recombinant anti-D immunoglobulin approved as an immunoprophylaxis treatment in Rh-negative mothers carrying an Rh-positive fetus. This study was conducted to assess the safety and tolerability of AntiD in clinical settings.

Post-marketing safety evaluation of recombinant anti-rho (D) immunoglobulin for the prevention of maternal rh-isoimmunization: A prospective, multi-centre, phase IV study Sweety Saiga et al from Brij Medical Centre Pvt Ltd, Kanpur 208020, Uttar Pradesh, Byramjee Jeejeebhoy Government Medical College and Sassoon General Hospital, Pune, Maharashtra, Government Medical College & Hospital, Aurangabad, Maharashtra, S.P. Medical College and Associated Group of Hospitals, Bikaner, Rajasthan, Cheluvamba Hospital, Mysore Medical College and Research Institute, Mysuru, Karnataka, Brij Medical Centre Pvt Ltd, Kanpur, Uttar Pradesh, Adichunchanagiri Hospital & Research Centre, Clinical Trial Centre, Mandya, Karnataka, India and Bharat Serums and Vaccines Limited, Mumbai, Maharashtra, India.

Corona virus disease 2019(COVID -19) is caused by the Severe acute respiratory syndrome corona virus (SARS-COV-2). In the absence of an effective treatment, vaccination becomes the main modality to control the incidence of infectious diseases. Hence there is a need to estimate the attitudes and willingness among pregnant women for COVID 19 Vaccine.

Acceptance for coronavirus disease 19 vaccines among pregnant women seeking antenatal care in tertiary care hospital by Ashakiran Thavarsingh Rathod et al from Dept. of Obstetrics and Gynecology, Dept. of Preventive and Social Medicine, and Bangalore Medical College and Research Institute, Bengaluru, Karnataka, India.

Polycystic ovary syndrome (PCOS) is the most common endocrine and metabolic disorder in premenopausal women which presents with signs and symptoms of androgen excess & ovarian dysfunction. Androgen excess termed as hyperandrogenaemia causes excessive insulin production, hormonal imbalance leading to increased LH: FSH ratio causing menstrual irregularities, acne and hirsutism. Particularly hyperandrogenism retards follicular growth, which can lead to microcysts in the ovaries, anovulation, and menstrual irregularities like oligomenorrhea or amenorrhea. The prevalence of infertility in women with PCOS can be as high as 70-80%, while almost 80% of anovulatory infertility cases are due to PCOS. Based on the Rotterdam criteria (2003), Polycystic Ovary Syndrome (PCOS) is diagnosed when the patients show two of the following clinical and endocrine features: chronic ovulatory disorder, clinical and/or hyperandrogenism, and polycystic ovaries. There is a high incidence of insulin resistance in PCOS patients. Resistance to insulin causes an increased level of insulin, decrease in sex hormone binding globulin (SHBG), increase in free androgen, and increased free testosterone level. These changes are responsible for various symptoms of PCOS. In these last years a great body of evidence has demonstrated the important role of altered insulin sensitivity in many, though not all, PCOS patients. Treatment of PCOS aims at decreasing insulin sensitivity, and maintaining balanced hormonal levels, which leads to regular menses and ovulation.

There is a renewed interest towards natural therapies in India to treat PCOS holistically and minimize drug related side effects and tolerability issues. Ovamystic is one such class of drug for PCOS management containing inositols and alpha-lactalbumin that have clinically proven efficacy without much of side effects.

Observational Study of Usage of a Combination of Inositols with Alpha-Lactalbumin (Ovamystic) in the treatment of Menstrual Irregularity in PCOS.

By Manish R. Pandya et al from Obstetrics and Gynecology, Mahavir Hospital & Manish IVF center Scientific Research Institute, Department of Dermatology, C U Shah Medical College, Surendranagar Gujarat & Medical Affairs Consultant and Advisor, Vitamystic Healthcare, Mumbai, Maharashtra.

We have case reports are.....

1. A rare case of ovarian torsion in premenarcheal age- Case report and review of Literature by Fozia Jeelani Wani et al from Dept. of Obstetrics and Gynecology, Apollo Institute of Medical Sciences and Research, Hyderabad, Telangana, India.
2. Ectopic molar pregnancy: A rare entity by Pushpalatha Radhakrishnan et al from Dept. of Obstetrics and Gynecology, Akash Institute of Medical Sciences, Bengaluru, Karnataka, India and Bangalore Baptist Hospital, Bengaluru, Karnataka, India.
3. De novo thoracic endometriosis in a menopausal women by Udit Ishan Merchant et al from Womens Hospital, Mumbai, Maharashtra, India.
4. Management of venous thromboembolism as a complication after Total laparoscopic hysterectomy with bilateral salpingectomy: A case report by Anjani Dixit from Dept. of Obstetrics and Gynecology, Pristyn Care, Bengaluru, Karnataka, India.
5. Cervical lacerations: A case series by Sarah Quraish et al from Dept. of Obstetrics & Gynecology, S.L. Christian Medical College, Vellore, Tamil Nadu, India.

**We have case series on .....**

1. Genetic abnormalities in sonographically detected heart diseases in antenatal period: A case series by Yogeshkumar Siddhyeshwar Chaudhar et al from Bhakti Sonography Clinic, Chinchwad, Neo Diagnostic Center, India and Shri Mauli Diagnostic Center, Pimpri-Chinchwad, Maharashtra, India.
2. Management of non-tubal ectopic pregnancy: A case series by 1. Salomi Singh et al from Dept. of Obstetrics & Gynaecology, MGM Medical College & Hospital, Navi Mumbai, Maharashtra, India

The aim of this study is to review the various modalities used for management of non-tubal ectopic pregnancies. Ectopic pregnancy is a rare occurrence comprising 1-2% of all pregnancies. However, the most common site for ectopic implantation is fallopian tube. Tubal ectopic pregnancies 95% of all ectopic pregnancies while rest 5% are non-tubal pregnancies. Common sites for non-tubal ectopic pregnancy are cervical, cornual, interstitial, caesarean scar, ovarian and abdominal. Often misdiagnosed, however, detailed history taking, clinical examination and ultrasound helps to establish diagnosis. In this article, we discuss various cases of non-tubal ectopic pregnancy managed with medical treatment using methotrexate or surgical intervention or a combination of both.

3. Significance of red cell alloantibodies other than anti-D during pregnancy and their effect on the newborn: A case series by Sweta Nayak from Dept. of Transfusion Medicine, Fortis Flt. Lt. Rajan Dhall Hospital, New Delhi, India  
Contrary to well-established guidelines in developed countries, awareness regarding red cell alloantibodies in antenatal period are lacking in India. Investigating for indirect antiglobulin test (IAT) is mostly limited to the Rh D negative antenatal cases. This case series revisits this vital aspect of maternal and fetal safety. Instances of alloantibody other than anti-D are reported.

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Individually we achieve, together we excel...

Regards

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