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NEWS LETTER

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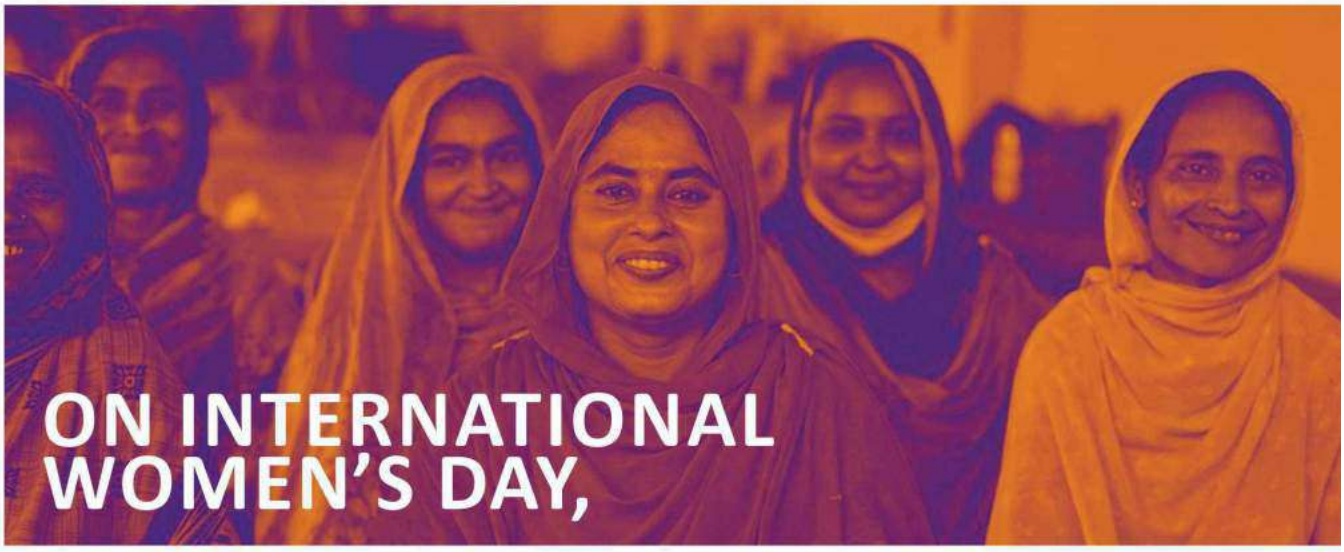
EDITORIAL



ON INTERNATIONAL WOMEN'S DAY,

we celebrate women and girls around the world, and we applaud all they have achieved in the fight for equality. Women and girls have made great gains – demolishing barriers, dismantling stereotypes and driving progress towards a more just and equal world. Yet they face immense obstacles. Billions of women and girls face marginalization, injustice and discrimination, while the persistent epidemic of violence against women disgraces humanity. Our world still reflects millennia of male-dominated power relations. And progress is under attack, with a fierce backlash against women's rights.

At our current rate, legal equality is some three hundred years away. We must move much faster. On International Women's Day, we stand with women and girls fighting for their rights, and we commit to accelerating progress. This year's theme – invest in women – reminds us that ending the patriarchy requires money on the table.

We must support women's organisations on the front line. And we must invest in programmes to end violence against women, and to drive women's inclusion and leadership ineconomies, digital technologies, peacebuilding and climate action.

This all depends on unlocking finance for sustainable development so that countries have funds available to invest in women and girls. Women's rights are a proven path to fair, peaceful, prosperous societies. It is good for us all.

Together, let's take urgent action to make it a reality.

Dr K Jayakrishnan

Managing Director & Chief Consultant KJK Hospital

(UN Secretary-General's message on International Women's Day)

FETAL ANOMALIES – DETECTION RATE AND RECURRENCE RISK

Dr Meenakshi A
MBBS, DNB Consultant in OBG & GYNEC

Mrs. X,32 years old Primi gravida, conceived with intrauterine insemination, came for regular antenatal check-up. Her first trimester NT scan showed a normal NT 1.9 mm with obliterated intracranial translucency. Penta screen was offered. It showed low risk for Trisomies 13,18 and 21 with a normal AFP level (1.47 MoM). The pregnancy was followed up till second trimester targeted scan which showed open neural tube defect (spina bifida) – lumbosacral (L4-L5) meningomyelocele, borderline ventriculomegaly with intracranial signs of lemon shaped skull and curved banana cerebellum. Hence, pregnancy was terminated at 18 weeks.

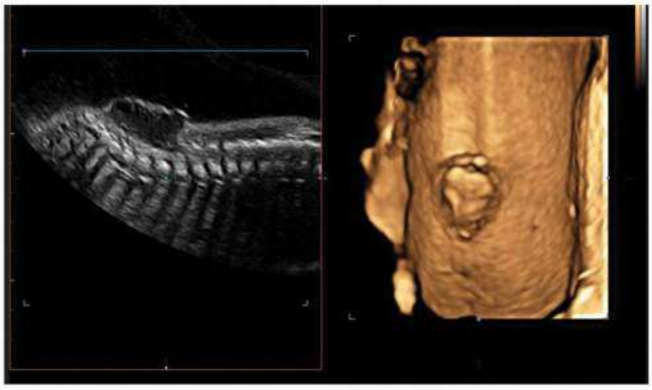


Figure 1 : 2D and 3D ultrasound image of spina bifida

Fetal anomalies can be defined as single or multiple structural abnormalities or functional changes that occur in utero. Fetal structural anomalies complicate 2 - 3% of all pregnancies. The diagnosis of such anomalies historically involved ultrasound scanning of the fetus, invasive sampling of either fetal cells or amniotic fluid, or interpretation of maternal biomarkers. Neural tube defects (NTDs) are considered to be serious congenital birth defects. Such defects arise because the neural tube fails to close. NTDs affects 1.2 per 1000 pregnancies worldwide. Prenatal screening with α-fetoprotein (AFP) and ultrasonography have allowed the prenatal diagnosis of NTD in current obstetric care.

Ultrasound has the advantage of being safe to use repeatedly to examine and monitor the pregnancy without adverse effects on the pregnant woman, or fetus. Whereas an increasing number of fetal anomalies can be detected in the 1st trimester, further fetal growth in the 2nd trimester allows improved visualization. It is recommended that all pregnant women be offered a mid-trimester ultrasound scan for the detection of structural fetal anomalies. This is generally performed between 18 and 22 weeks. The second trimester allows for optimal examination of fetal anatomy, along with screening for soft mark that all pregnant women be offered a mid-trimester ultrasound scan for the detection of structural fetal anomalies. This is generally performed between 18 and 22 weeks. The second trimester allows for optimal examination of fetal anatomy, along with screening for soft markers for aneuploidy, evaluation of fetal size and the presence of abnormal placentation.

Maternal serum screening for open NTDs was done using AFP. Maternal serum AFP test is performed between 15 and 20 or 22 gestational weeks using the threshold of 2.5 mom, with an anticipated sensitivity of 85% for NTD detection, a screen-positive rate of 5% or less and a positive predictive value of about 2% (2% of all women with a positive test result are carrying a fetus with an NTD). Hence it should not be the sole screening method for detecting NTDs, and that routine second-trimester ultrasound should be included as part of standard prenatal care. Women with elevated maternal serum AFP levels should be referred to institutions that can perform level II ultrasound. If the level II ultrasound is normal, the patients can be told that the risk of an anomaly is low and can make an informed decision about whether or not to proceed with amniocentesis as ultrasound is 97% sensitive and 100% specific in diagnosing open NTDs.

Detection rates for major anomalies at the mid-trimester scan vary, and have been reported at around 60%, based on the anatomical system involved and on the expertise of the sonographer. Higher detection rates are reported for major and lethal anomalies (84%). Compared with selective screening for 'at risk' pregnancies, a Cochrane Review concluded that the performance of a routine scan for all pregnant women prior to 24 weeks improves the prenatal detection rate of major fetal abnormality (RR: 3.46; 95% CI:1.67). The rationale for offering routine morphology screening is supported by the fact that 75% of anomalies occur in low-risk women.

The sensitivity for prenatal detection varied depending on the organ systeminvolved with higher detection rates for pulmonary (83%), and central nervous system(82%) anomalies, and lower detection rates for cardiac anomalies (13%). The false-positive rate (malformations that could not be confirmed after delivery) was 5.3%, including hydronephrosis and pleural effusions that resolved during pregnancy.When a fetal abnormality is detected in the midtrimester, referral to a tertiary level ultrasound provider and/or a fetalmedicine subspecialist is recommended. Confirmation of the anomaly and further counselling regarding management and prognosis can then be undertaken. Given that fetuses with structural anomalies are at an increased risk for karyotypic and other genetic abnormalities, amniocentesis for chromosomal assessment with microarray should also be considered.

There are some factors that can adversely affect the detection rates of fetal anomalies in the second trimester. These include technical factors, such as the experience of the operator and the sophistication of the machine; and patient factors, including gestational age, maternal obesity and fetal crowding in multiple pregnancy. It is estimated that maternal obesity alone is associated with at least a 20% reduction in the detection of structural anomalies, and an increase in the need for repeat imaging.

The majority of identifiable anomalies will be detected with 2D ultrasound, but in certain cases (such as facial clefts or talipesequinovarus) three dimensional(3D) ultrasound may provide additional detail. For some anomalies, additional assessment with serial ultrasounds, fetal echocardiography, magnetic resonance Imaging (MRI), or genetic testing of the fetus may also be recommended. These can assist in further characterization of the defect, and in the counselling of the parents when explaining the nature of the anomaly.

Since the aetiology of most congenital anomalies is multifactorial or unknown, there is a lack of information concerning the recurrence risks for most anomaly groups and subtypes. History of congenital anomaly in the first pregnancy was associated with a 2.5-fold risk of recurrent anomaly in the second pregnancy despite lower overall prevalence of a congenital anomaly in second pregnancies compared with first pregnancies. For similar anomalies, the recurrence risk was nearly 24 times higher, while for dissimilar anomalies, the increase was considerably more modest (1.4-fold).

Only 5% of NTDs occur in families with a positive family history, and 95% of NTDsoccur spontaneously in women with no family history. The recurrence risk increases to 10-fold the population risk when a woman has had one previous affected pregnancy, doubles for two previous affected pregnancies and quadruples for three previous affected pregnancies. Chromosomal abnormalities, risk factors, syndromes, disorders and other etiologies should be considered during counselling on the recurrence risk of anomalies.

The second trimester anomaly scan remains the standard of care for the detection of fetal structural anomalies. Despite the further advances expected within the field of prenatal genetics, there will remain a significant role for ultrasound screening for fetal structural anomalies across all the trimesters.

COMPLETE SEPTATE UTERUS WITH CERVICO-VAGINAL DUPLICATION: A CASE REPORT

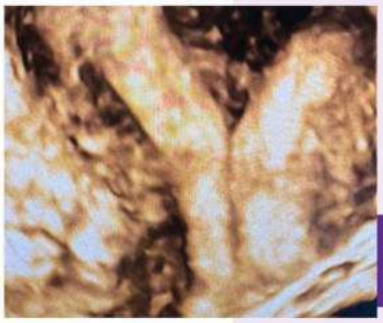
Dr Mayank Jain
MD, OBG Fellow in Reproductive Medicine

Introduction:

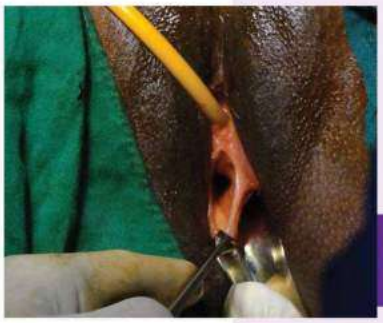
Müllerian duct anomalies consist of a set of structural malformations, resulting from abnormal development of the paramesonephric or Müllerian ducts. The prevalence of these anomalies range to 4%–7% in the general population. Müllerian anomalies are frequently asymptomatic, and are often missed in routine gynecological examinations.

Case report:

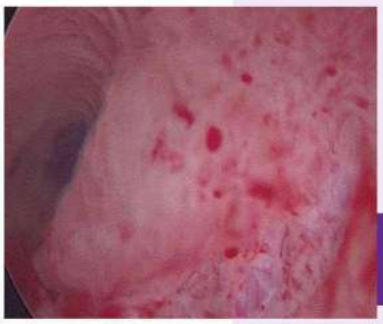
We present a case of 26 year lady with complaints of irregular menstrual cycles since 2 years and trying to conceive since 1 year. Her cycle length was of 45 to 50 days, menses last for 7 to 8 days, with average flow, associated with dysmenorrhea. There was no history of significant increase in weight in last 6 months, excessive facial or body hair, acne or discharge from bilateral breast. Husband has no history of alcoholism or cigarette smoking. No complains of coital difficulty. There was no history of chronic medical illness or surgery. General physical and systemic examination were normal. Her BMI was 22.07Kg/m2. A per speculum examination revealed a longitudinal vaginal septum extending from left lateral vaginal wall to posterior vaginal wall. Also duplicated cervix was noted. Transvaginal 3D ultrasound revealed a uterine septum extending upto lower part of uterus, likely a complete septate uterus. Bilateral polycystic ovarian morphology was also noted, with right ovarian volume of 14.9 cc, and left ovarian volume of 11.6 cc, with about 12 to 15 small antral follicles in each ovary. Diagnosed to have hypothyroidism and started on levo-thyroxine 50 mcg once a day. Husband's semen analysis was normal. A thorough discussion was done with the couple. The patient was planned for Operative hystero-laparoscopy with septal resection under GA. Consent was taken for procedure with risks of the procedure discussed and explained to the patient and husband. Intraoperatively the vaginal septum was clamped, cut and ligated. The resection of double cervix was done in a similar manner. Hysteroscopy revealed septum extending upto the level of internal os. No fundal indentation was noted during concurrent laparoscopy. Hysteroscopic septal resection was done with hysteroscopic scissors under laparoscopic guidance. Bilateral ovaries were found to be bulky and hence PCO puncturing was done with monopolar cautery. Blood loss was minimal. Patient was discharged on postop day 2. Follow up visits after 2 weeks and 6 weeks was normal. Per speculum exam after 6 weeks showed single healthy looking cervix. Further plan discussed with patient to try to conceive after 2 cycles and cervical prophylactic encirclage during pregnancy.



3D ultrasound showing septate uterus



Longitudinal vaginal septum



Hysteroscopic image-showing uterineseptum

No fundal indentation on laparoscopy

Discussion:

Complete septate uterus with duplicated cervices and longitudinal vaginal septum is a rare Mullerian anomaly. However, ASRM 2021 has classified this into category of Septate uterus. This condition is identified as single uterine body with wide fundus, that may have external midline fundal indentation of <1 cm. The endometrium is divided extending from fundus through the cervix. Cervix is duplicated, which may be asymmetric in size and location. Longitudinal vaginal septum extending full length from cervical septum to introitus. For diagnosis some clinicians emphasize the utility of laparoscopic assisted hysteroscopy whereas some use MRI for definitive and noninvasive diagnosis. 3D transvaginal ultrasound is extremely accurate and cost effective for diagnosis of Mullerian anomaly. This condition is usually misdiagnosed as uterus didelphys if correct radiological investigation or laparoscopy is not done, and patient is not offered any further corrective treatment. Also, due to small number of reported cases with corrective surgeries, long term outcomes are still uncertain. Role of septal resection in recurrent pregnancy loss is well established however its role in a fertile asymptomatic woman is again a controversial area. But most authors agree reconstructive surgery is recommended if complete septum is present. The hysteroscopic resection of the cervical septum may be related to cervical incompetence, hence the plan for cervical cerclage during pregnancy in our patient. In regards to mode of delivery, some reports have documented vaginal delivery even after cervical septal resection where patient was admitted in spontaneous labour with head engaged, while most studies have preferred elective cesarean section for such patients.

CHLAMYDIA TRACHOMATIS INFECTION -PELVIC INFLAMMATORY DISEASE (PID) SEQUELE.

Dr Gayathri

MBBS, MS, OBG Fellow in Reproductive Medicine

Case report:

Mrs. X 24 years old primigravida with spontaneous conceptionof 5 weeks 1 day, came with complaints of left side abdominal pain. USG suggestive of right sided ectopic gestation with hemoperitoneum. She was married for 2 years and had primary infertility. She underwent emergency operative laparoscopic salpingectomy and suctioning of endometrial cavity and post op recovery went well and Bhcg levels were falling trend and HPR report confirmed the diagnosis.

DISCUSSION: Introduction

Chlamydial infection is the most frequently reported and most common sexually transmitted infection and prevalence is highest among persons aged ≤24 years that is, women of reproductive age with a prevalence of 4.0% compared with 2.8% among men. 10%–30% of women experience one or more chlamydia episodes. With up to 70% of infections being asymptomatic and untreated making women prone to chlamydia-related sequelae such as pelvic inflammatory disease (PID), ectopic pregnancy and tubal factor infertility (TFI). Proportions of PID following chlamydia were found between 3-30%, for ectopic pregnancy between 0.2- 2.7% and for TFI between 0.1% - 6%. Chronic pelvic pain and repeated infection is associated with complications like Fitz-Hugh–Curtis syndrome which is defined as perihepatitis associated with pelvic inflammatory disease.

As per Evidence reviewed as part of the Centres for Disease Control and Prevention Chlamydia Immunology and Control Expert Advisory Meeting, in high-risk settings, 2%–5% of untreated women developed PID within the ~2-week period between testing positive for C. Trachomatis and returning for treatment. However, the rate of PID progression in the general, asymptomatic population appears to be low. According to the recent studies, after symptomatic PID of any cause, up to 18% of women may develop infertility. Repeated infection is associated with PID and other reproductive sequelae as it damages the cilia lining the fallopian tubes, fallopian tube blockage or closure, or adhesion formation among pelvic organs. Because of serious sequelae, chlamydia screening and treatment programs have been implemented to reduce transmission.

Diagnosis:

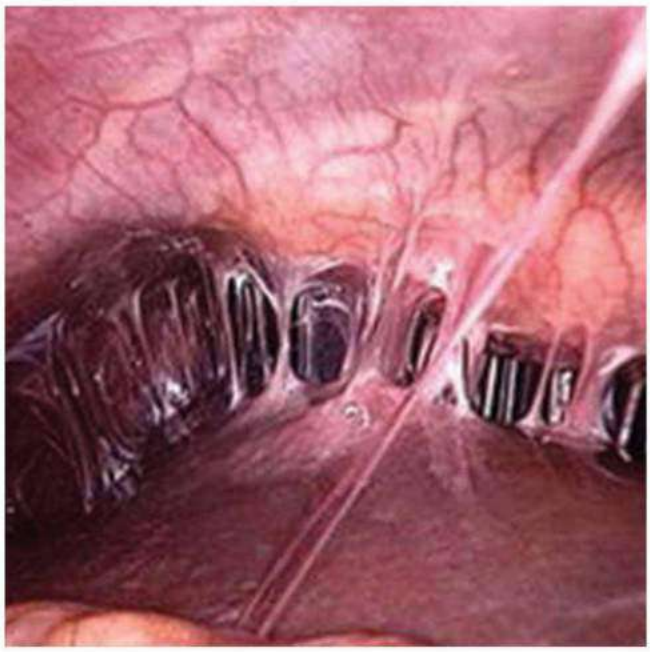
For women, C. Trachomatis urogenital infection can be diagnosed by vaginal or cervical swabs or first-void urine and for men, by testing first-void urine or a urethral swab. There are FDA approved POCT (point-of-cure test) for detection like **NAAT-based**(Nucleic acid amplification tests, such as Cepheid GeneXpert CT/NG assay) POCTs for CT have a significantly better performance particularly in sensitivity for diagnosing the infection with CT than the **AD-based** (Antigen detected) tests. Another FDA approved POCT is Binx IO, a rapid, point-of-care option for the detection of C. Trachomatis and N. Gonorrhoeae infections. The test results are completed in approximately 30 minutes, allowing for testing and treatment in the same visit (96.1% sensitivity and 99.1% specificity for chlamydia) and preventing the loss of follow-ups.

Treatment:

Helps in preventing adverse reproductive health complications and continued sexual transmission. Furthermore, treating their sex partners can prevent reinfection and infection of other partners. Treating pregnant women prevents transmission of C. Trachomatis to neonates during birth.

Recommended regimen: **Doxycycline** 100 mg orally 2 times/day for 7 days. *Alternate regimen*: **Azithromycin** 1 g orally in a single dose or levofloxacin 500 mg orally once daily for 7 days. A randomized trial reported microbiologic cure was 100% with doxycycline and 74% with azithromycin and available evidence supports that doxycycline is efficacious for C. Trachomatis infections of urogenital, rectal, and oropharyngeal sites.

To minimize disease transmission to sex partnersand risk for reinfection, abstain from sexual intercourse for 7 days after single-dose therapy or until completion of a 7-day regimen and resolution of symptoms if present. Men and women who have been treated for chlamydia should be retested approximately 3 months after treatment. Contact tracing should be done and partners should be referred for evaluation, testing, and presumptive treatment if they had sexual contact with the partner during the 60 days preceding the patient's onset of symptoms or chlamydia diagnosis.



Conclusion:

The risk of ectopic pregnancy is increased 15-50% in women with a history of PID Chlamydia trachomatis has been linked to 30-50% of all ectopic pregnancies, due to irreversible tissue damage. Although a detected chlamydial infection may simply be a marker for high-risk sexual behaviour and exposure to other sexually transmitted infections, these findings increase the risk of PID. Additional exposures may increase the risk of subsequent PID. So early diagnosis, treatment and counselling regarding safe sex practices are very important to decrease the sequelae of chlamydial infection.

INFERTILITY WITH RECURRENT ASCITES - AN UNUSUAL PRESENTATION OF ENDOMETRIOSIS

Dr Sharda Sharma

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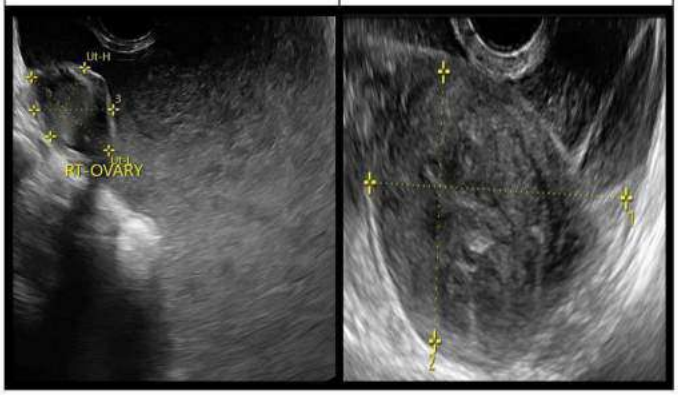
Introduction:

Endometriosis is a common condition affecting up to 10% of women of reproductive age. It is a debilitating condition characterized by high recurrence rates and diagnosed in up to 30-40% of patients evaluated for infertility. Endometriosis mostly presents with chronic pelvic pain, dyspareunia or dysmenorrhea, infertility and very rarely massive ascites. In most cases, the presence of massive haemorrhagic ascites usually associated with malignancies, tuberculosis etc.

Case report:

A 32 year-old nulligravida married since 9 years trying to conceive for 8 years. She has history of recurrent ascites, exploratory laparotomy in view of abdominal distension. Per op - 2 loculi of encysted ascites noted, same drained approximate 4 litre of straw coloured fluid. Uterus, left tube and ovary seen. Right tube and ovary obscured by adhesions. Cytology for malignant cells and cultures were negative. HPR - Negative for tuberculosis. Later on TB gold quantiferon done in view of recurent accumulation of fluid in peritoneal cavity, which was positive, took ATT for 6 months, extended to 9 months in view of persistent accumulation of ascetic fluid. Did MRI- suggestive of right hematosalpinx and multiloculated ascites, there were no pelvic masses and other abdominal organs were unremarkable. She had no history of fever, cough, night sweats, weight loss, nausea, vomiting or change in bowel habit, or urinary complaints. She attained menarche at 14 years and has 5/30 days regular cycles, no dysmenorrhea and deep dyspareunia. Physical examination vital signs were normal, PA –revealed a non-distended, non-tender abdomen with positive shifting dullness. Per speculum and per vaginal examination normal. No other clinical abnormalities were observed. Laboratory investigations revealed a packed cell volume of 35%, white blood cell count of 4,900/mm3, (Polymorphonuclear neutrophils - 63%, lymphocytes -34 % and monocytes 3%). Liver function tests, RFT and Electrolytes were within normal limits. Serology for HIV, hepatitis B and C was negative. An abdominal and pelvic ultrasound was performed- massive ascites with internal echo. Bilateral ovaries showed cyst with internal echoes. It showed no lesions in the liver, spleen, pancreas, kidneys, uterus. No other abnormalities were found. Chest X-ray and 2D Echo were normal.

RIGHT OVARY WITH MASSIVE ASCITIS	UTERUS

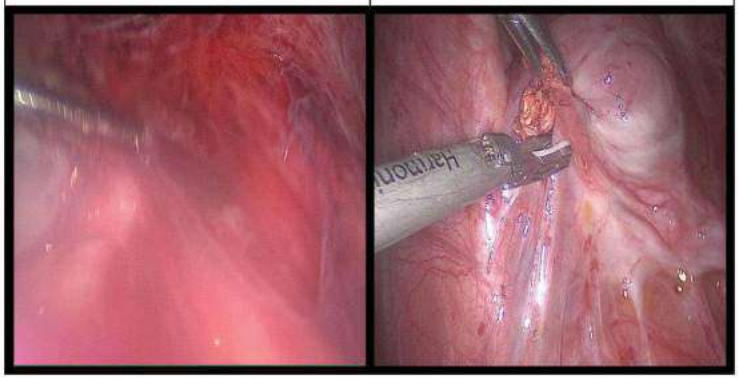


In view right hematosalpinx decision for operative laparoscopy with operative hysteroscopy was taken. Per op -extensive adhesions were observed, multiloculated, straw coloured, serous ascitic fluid drained from peritoneal cavity. After draining ascitis fluid and adhesiolysis, only fundus portion of uterus visualised, lower portion of uterus, right tube and ovary buried in adhesions. Left ovary and fimbrial end of tube visualized at the pelvic brim adherent to lateral pelvic wall. POD completely obliterated. Other intra-abdominal organ completely sealed off in adhesions, 5 litres of ascetic fluid drained and send for culture, cytology and AFB staining. Peritoneal biopsy taken and send for gene expert. Right salpingiolysis done. Intraoperative USG done to locate right ovary and tube, tube found to dilated, same delinked using Harmonic Ace Scalpel followed by partial salpingectomy and sample send for HPR. Endometrial sampling taken for HPR and gene xpert. Laparoscopy has the advantage of minimal tissue handling as well as providing a panoramic view of the peritoneal cavity. Intra op and post op period was uneventful. HRP- fallopian tube bits with complete mucosal replacement by endometrial tissue and thickened wall, consistent with changes seen in endometriosis of fallopian tube. No evidence of TB. Cytology for malignant cells was negative. Plan for assisted conception with GnRH agonist protocol.

Case report:

The most common endometriotic sites in decreasing order are the ovaries, anterior/posterior cul-de-sac, broad ligaments, uterosacral ligaments, uterus, fallopian tubes, sigmoid colon and appendix. The symptoms of endometriosis are often correlated with the site of the implant and an unusual presentation of massive ascites has been described. Various theories have been proposed for this rare presentation, which may be related to the expression of inflammatory cytokines, growth and angiogenic factors as well as the expression of aberrant genes. Once the correct diagnosis is made, the treatment is the same as that of endometriosis. IVF and, consequently, COH did not seem to be associated to a higher rate of endometriosis recurrence.

RIGHT OVARY WITH MASSIVE ASCITIS	UTERUS



Conclusion :

Endometriosis is prevalent amongst infertile women and may present in unusual manner. Clinician must be aware that endometriosis may cause massive ascites.

Ascites due to endometriosis is very rare and may pose a diagnostic challenge in resource poor settings where delayed presentation is quite common. It should be considered in the differential diagnosis of ascites in women at reproductive age. Timely diagnosis and appropriate treatment halt the progression of the disease. Early intervention in the form of assisted reproduction should be considered in patients with extensive disease and concomitant tubal disease.

RECENT ADVANCES IN DIAGNOSIS AND MANAGEMENT OF FEMALE GENITAL TUBERCULOSIS

DR Aadya Dixit

FNB Resident Reproductive Medicine

Female genital tuberculosis (FGTB) is a chronic granulomatous inflammatory disease caused by mycobacterium TB which is usually secondary to pulmonary TB through hematogenous route or lymphatic route but can occur through contagious spread from adjacent ileocaecal TB. Most commonly it is observed in younger age group (20-40 years). The prevalence of FGTB in infertility patients is 6–25% in India being more in tertiary referral centers and in assisted reproduction centers.

Case presentation:

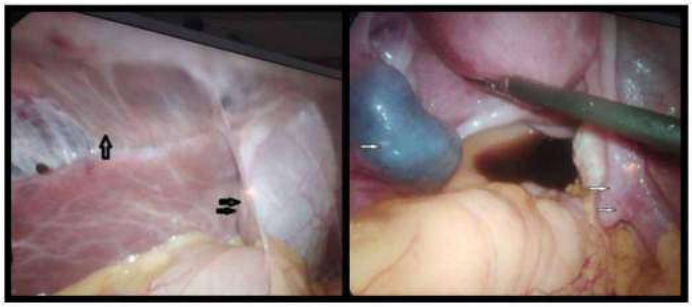
We present a case of 35 years old female patient with chief complaints of oligomenorrhea and secondary infertility(A1). She was having previous history of cervical and intestinal TB for which she underwent cervical lymphadenectomy in 2018 and 2019, took ATT twice for total of 2 years. Transvaginal ultrasound was performed which showed an anteverted normal sized uterus and bilateral normal ovaries. Patient was scheduled for diagnostic hysteroscopy - targeted endometrial biopsy with SSG. Intra-operative findings revealed a stenosed cervical canal, normal endometrial cavity and normal bilateral tubal ostia. SSG was suggestive of bilateral patent fallopian tubes. Endo comprehensive panel was done that did not revealed presence of M. tuberculosis. Patient is now planned for Ovulation induction with oral ovulogens.

Discussion:

Fallopian tubes are mostly affected (90–100%) followed by uterus (70%), ovaries (30%), cervix (10%) and rarely vulva and vagina (1% each). Tubal involvement manifests as salpingitis with the formationof hydrosalpinx, pyosalpinx, tubo-ovarian masses, adhesions and tubal obstruction. Endometrial involvement commonly manifests as uterine cavity distortion and intrauterine adhesions. Findings of adhesions, caseation, adnexal cysts, tubo-ovarian masses and defective ovarian reserve are noted when ovaries are involved. Latent FGTB causes recurrent pregnancy loss (RPL) and infertility, which is the major cause of concern in developing countries like India.

Endometrial aspirate or peritoneal biopsy

AFB microscopy using ZN staining, Mycobacterial culture: LJ medium, BACTEC 460 and MGIT 960 radiometric culture system, Versa TREK, CBNAAT or gene Xpert, Loop-mediated isothermal amplification (LAMP), Molecular line probe assays (LPA) and histopathology for detection of epithelioid granuloma.



TB lesions on **laparoscopy**: (A)Perihepatic adhesions (Fitz–Hugh– Curtis syndrome) and hanging gall bladder sign (B)Blue python sign with distended hydrosalpinx.

TB lesions on hysteroscopy are pale endometrium, tubercles, caseous nodules, chronic endometritis, edema, micropolyps, varying grades of intrauterine adhesions and distorted and shrunken uterine cavity with obliterated ostia.

Treatment of FGTB is similar to pulmonary TB and is given for total 6 months. The standard regimen, which consists of a 2-month intensive phase with isoniazid, rifampin, ethambutol, and pyrazinamide followed by a 4-month continuation phase with isoniazid and rifampin has been used to treat FGTB, with low rates of disease recurrence For primary or secondary drug-resistant FGTB, longer oral regimen with reserve drugs is given for 18–20 months.

Female genital tuberculosis (FGTB) is a chronic granulomatous inflammatory disease caused by mycobacterium TB which is usually secondary to pulmonary TB through hematogenous route or lymphatic route but can occur through contagious spread from adjacent ileocaecal TB. Most commonly it is observed in younger age group (20-40 years). The prevalence of FGTB in infertility patients is 6–25% in India being more in tertiary referral centers and in assisted reproduction centers.

The program is now called National Tuberculosis Elimination Program (NTEP), and categorization of TB has been stopped. According to the India TB Notification Policy, the tuberculosis notification portal, Nikshay, must be used to notify all TB patients, including those with FGTB.

Treatment is planned as follows

01 **If tubes are patent on laparoscopy and endometrium is normal on hysteroscopy, normal conception is tried or ovulation induction drugs are given.**

02 **If tubes are blocked, but endometrium is receptive (normal), IVF-ET is performed with good outcome and conception rate of up to 25%.**

03 **If tubes are blocked and endometrium is not receptive with more than grade 3 adhesions, then gestational surrogacy is advised.**

04 **If tubes are blocked and endometrium is not receptive and ovaries are also damaged, then adoption is advised.**

CONCLUSION

Although FGTB remains an uncommon extrapulmonary manifestation of TB, it should remain an important consideration for the evaluation of women presenting with pelvic symptoms, including infertility. Patient presented with infertility or menstrual disorders should be screened for TB as a routine protocol. Timely diagnosis and adequate treatment is necessary to avoid complications of FGTB.

ONCOGENIC POTENTIAL IN ENDOMETRIAL POLYPS

Dr Karunya
MBBS MS OG

Case report:

70 years old postmenopausal woman came to our hospital with complaints of mass protruding per vagina with difficulty in walking and voiding urine and c/o umbilical bulging with slight pain. On examination, P/A Soft, Non tender, Umbilical hernia -2 x 2 cm, cough impulse++, tenderness++. P/S 3rd degree Uterine prolapse noted, Mild cystocele, No rectocele, Lax perineum, Cx eroded bleeds on touch, Vagina healthy. P/V Uterus retroverted, Cx hypertrophied and bleeds on touch, fornices free and no tenderness. PAP smear taken- Negative for intraepithelial lesion or malignancy. TVS- Uterus with calcified fibroid anterior IMF- 4.1 x 4.3 cm.ET- 5 mm. TAS- Umbilical hernia defect-1.3 cm. Routine investigations done. She underwent LAVH + B/L Salphingo oophorectomy + Posterior colpoperineoraphy + Moschowitz repair + Umbilical hernia repair. Postoperative period was uneventful. HPR reports showed uterus showing cystic atrophic endometrium. Endometrial polyp with adenocarcinoma in situ changes (No invasion into myometrium) and moderate chronic cervicitis. Both fallopian tubes and ovaries- Normal, Myometrium completely calcified leiomyoma-5 cm in diameter present. Other bits show only fatty tissue. Patient was referred to RCC Trivandrum for oncologist opinion. P16 immunohistochemistry was found to be positive.

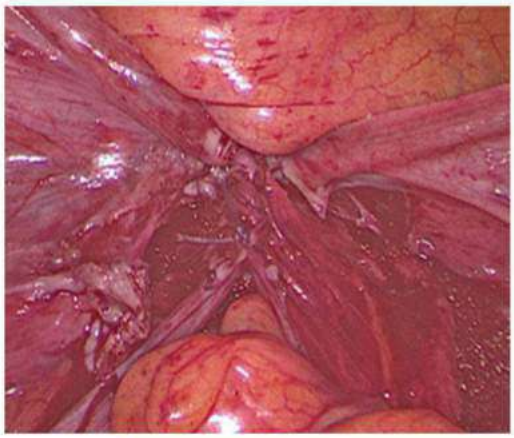
Discussion:

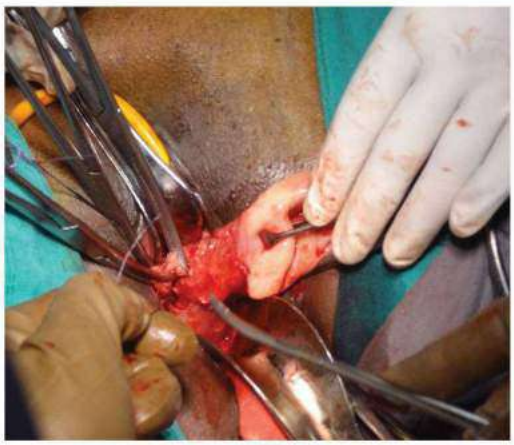
Endometrial polyps are found in both premenopausal and postmenopausal women. Patients may either be asymptomatic at the time of diagnosis or present with abnormal bleeding patterns, including intermenstrual bleeding, menorrhagia, or postmenopausal bleeding . The exact cause of endometrial polyps is unknown, but estrogenic activity appears to play a crucial role in their pathogenesis and growth. Several molecular mechanisms have been proposed to play a role in the development of endometrial polyps. These include overexpression of endometrial aromatase, unbalanced activity between estrogen and progestin, inhibition of apoptosis, certain gene mutations that favor endometrial proliferation, and cellular mechanisms linked with inflammation.

Various studies indicate that malignancy occurs within 0.9% to 12.9% of endometrial polyps. Although there is no consensus in the literature on the exact risk factors that are associated with malignant transformation of polyps, most authors agree that the risk of malignancy is increased with age and menopausal status and with the presence of symptomatic bleeding. Larger endometrial polyps also have been shown to be a risk factor for premalignant or malignant pathology, with authors advocating a cut-off point of 1.0 to 1.8 cm diameter as a risk factor.

The rationale for removing polyps is to exclude malignancy and to relieve symptomatic vaginal bleeding. Management of small asymptomatic polyps may be conservative with follow-up. However, conservative management should be undertaken with caution in postmenopausal patients, patients with any risk factors, or those with polyps measuring greater than 1.0-1.5 cm in size, as there is increased risk for atypical hyperplasia or malignancy. Risk factors for malignancy differ among reports and populations; however, larger size, advanced age, menopausal status, obesity, diabetes, arterial hypertension, and tamoxifen use have been associated with malignancy.

Hysteroscopic polypectomy remains the mainstay of evaluation and operative management of endometrial polyps as the associated morbidity is minimal when compared to a hysterectomy. Operative hysteroscopy allows for visualization of the entire uterine cavity. There are a variety of methods practiced to remove polyps at hysteroscopy (sharp scissors, electrosurgical techniques); Therefore, the method of choice should be one that is most familiar to the surgeon. Regardless of which method is employed, removal of the entire polyp, including complete excision of the polyp stalk, should be achieved. Studies have indicated that removal of endometrial polyps by blind curettage is unsuccessful in more than 50% of attempts, and, in many cases, the removal is incomplete. Therefore, blind curettage should not be used as a diagnostic or therapeutic intervention. If malignancy is found within the polyp, the patient should be referred to a gynecological oncology specialist for further staging and management. The immmunohistochemical panel used to distinguish endometrial from endocervical primaries includes estrogen receptor (ER), vimentin, monocolonal carcinoembryonic antigen (CEA) and p16.





STATISTICS

JAN TO DEC 2023

TOTAL CASES	**1,053**
Laparoscopy	295
Hysteroscopy	254
Minor cases	186
Male cases	33
Obstetric cases	278
Others	7
LAPAROSCOPY CASES	**295**
TLH	64
Myomectomy	79
Adenomyomectomy	13
Cystectomy	40
Salpingectomy	15
Salpingostomy	7
Adnexectomy	6
PCO puncturing	11
Endometriosis surgery	27
Lap abdominal encirclage	7
Lap abdominal encirclage removal	2
Ovarian PRP instillation	6
Gonadectomy	1
Lap ovarian detorsion & oophoropexy	2
Lap sterilization	10
Lap sacrocolpopexy	1
Lap isthmocele repair	2
LAVH	2

HYSTEROSCOPY	**254**
Pre IVF	57
Diagnostic	82
Operative	115
SMF resection	14
Endometrial biopsy	46
Septal resection	10
Therapeutic curretage	2
Tubal cannulation	9
Hysteroscopic polypectomy	34
MINOR CASES	**186**
Suction evacuation	48
Endometrial sampling	40
SSG	35
Cervical encirclage	28
EUA	1
ERA	5
IUD insertion	8
Amniocentesis	10
Vaginal tightening	1
Vaginal botox injection	1
Incision and drainage	4
Colposcopy directed biopsy	1
Fetal reduction	2
MALE CASES	**33**
TESA	24
TESE	3
NAB	36

OBSTETRIC CASES	**278**
FTND	90
LSCS	188
Elective LSCS	93
Emergency LSCS	95
Vaccum delivery	19
OTHER CASES	**7**
Vaginal hysterectomy + PFR	6
Laparotomy-myomectomy	1
TOTAL CONCEPTION	**374**
Spontaneous conception	158
COH + Natural conception	34
IUI conception	69
IUI conception rate	16.71%
ART : IVF/ICSI STATISTICS	
Total no of cases	290
Total conception	115
Total conception rate	39.65%
Total conception in FET cycles	94
Conception rate after FET cycles	41.77%
Total conception in fresh cycle	21

JAN TO FEB 2024

TOTAL CASES	**176**
Laparoscopy	51
Hysteroscopy	46
Minor cases	29
Male cases	14
Obstetric cases	34
Others	2
LAPAROSCOPY CASES	**51**
TLH	13
LAVH	2
Myomectomy	12
Adenomyomectomy	1
Cystectomy	9
Salpingectomy	3
Salpingostomy	3
para ovarian cystectomy	1
Adnexectomy	1
PCO puncturing	3
Fulguration of endometriotic deposits	1
Sacrocolpopexy	1
Diagnostic laparoscopy	1

HYSTEROSCOPY	**46**
Pre IVF	5
Diagnostic	13
Operative	28
SMF resection	1
Endometrial biopsy	17
Septal resection	1
Tubal cannulation	1
Hysteroscopic polypectomy	8
MINOR CASES	**29**
Suction evacuation	8
Manual removal of placenta	1
SSG	6
Cervical encirclage	2
Pipelle sampling	5
EUA	1
Mirena insertion	1
Amniocentesis	4
Hymenectomy	1
MALE CASES	**14**
TESA	8
NAB	6

OBSTETRIC CASES	**34**
FTND	15
LSCS	19
Elective LSCS	12
Emergency LSCS	7
Vaccum delivery	2
OTHER CASES	**2**
Vaginal hysterectomy	2
TOTAL CONCEPTION	**43**
Spontaneous conception	19
COH + Natural conception	2
IUI conception	10
IUI conception rate	12.23%
ART : IVF/ICSI STATISTICS	
Total no of cases	39
Total conception	12
Total conception rate	30.76%
Total conception in FET cycles	11
Conception rate after FET cycles	33.33%
Total conception in fresh cycle	33%

POSTDOCTORAL TRAINING IN REPRODUCTIVE MEDICINE

(GYNAE ENDOSCOPY & ASSISTED REPRODUCTION)

For Postgraduates planning to pursue a career in Reproductive Medicine

Course Duration - 12 months
Jan, May, Sep - Two candidates each

Qualification Post Graduate - M.D, or DNB in Obstetrics & Gynaecology

Details can be found on the
Website: www.kjkhospital.com
Email: kjkhospital@gmail.com, info@kjkhospital.com

FOR DETAILS CONTACT : Dr. K. JAYAKRISHNAN

FNB - REPRODUCTIVE MEDICINE BY NATIONAL BOARD STARTED

OUR TEAM

MAIN SPECIALITIES

REPRODUCTIVE MEDICINE & LAPAROSCOPY
- **DR K JAYAKRISHNAN** MBBS, MD (OBG), DGO, DNB
- **DR NIRANJANA J** MBBS, MD (OBG), DNB
- **DR ASHWIN JAYAKRISHNAN** MBBS, MS (OB), DN

IVF COORDINATOR
- **DR ANITHA M** MBBS

OBSTETRICS & GYNAECOLOGY
- **DR DEEPTI B** MBBS, MD (OBG), DGO, MRCOG

CONSULTANTS IN OBSTETRICS & GYNAECOLOGY
- **DR MEENAKSHI A.** MBBS, DNB
- **DR K MONISHA** MBBS, MS(OBG)

PAEDIATRICS & NEONATOLOGY
- **DR MADHU K V** MBBS, MD, DCH
- **DR AJAY EDWIN** MBBS, MD, DNB

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- **DR APARNA SUDARSAN** DA, DNB
- **DR RATHEESH REGHUNATH** MBBS, MD

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- **DR MAYANKJAIN** MD, OBG
- **DR AADYA DIXIT** MBBS, DNB
- **DR S GAYATHRI DEVI** MBBS, MS (OBG)
- **DR KARUNYA C** MBBS, MS, OG

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- **DR VINOD K V** MS, MCH (URO)

SURGEON
- **DR SUBHASH** MS

VISITING CONSULTANTS
(ALLIED SPECIALITIES)

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PULMONOLOGY
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CARDIOLOGY
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ENDOCRINOLOGY
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ENT CONSULTANT
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DIETICIAN
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