NEWS LETTER

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Email: kjkhospital@gmail.com | www.kjkhospital.com

KJK HOSPITAL

FERTILITY RESEARCH AND GYNAEC CENTRE

Shawallance Lane, Nalanchira, Trivandrum-15
Phone: 0471-2544080, 2544705, 2544706 Fax: 0471-2543926

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From the Editors Desk.....

Welcome to the April edition!

As we are awaiting another world health day on the 7th of April, we bring for your appraisal six interesting cases that we had in the last three months. In the recent years, themes of world health days revolve around lifestyle diseases like diabetes and depression. The case in this newsletter highlights the fact that we are not yet done with infectious diseases like tuberculosis. One has to be familiar with the new face of this old disease as it is re emerging as a major threat to global health.

When a suspicion of pelvic TB is there, it is important that we confirm it as early as possible so that the treatment can be started. I'd like to share with you a relatively new test for the fast diagnosis of tuberculosis in patients- the GeneXpert Test

Genital tuberculosis (GTB) is one of the major causes for severe tubal/ uterine disease leading to infertility. Unlike pulmonary tuberculosis, the clinical diagnosis of GTB is difficult because in majority of cases the disease is either asymptomatic or has varied clinical presentation. Routine laboratory values are of little value in the diagnosis. Hysterosalpingogram (HSG) or laparoscopy cannot be confirmatory always. Due to the paucibacillary nature of GTB, diagnosis by mycobacterial culture and histopathological examination (HPE) have limitations and low detection rate.

The Genexpert test is a new molecular test for TB which diagnoses TB by detecting the presence of TB bacteria. It is a cartridge based nucleic acid amplification test that detects DNA in TB bacteria. The result may be made available as early as 2 hours. It also detects genetic mutations associated with resistance to the drug Rifampicin. A review to assess the diagnostic accuracy of Xpert TB found that when used as an initial test to replace smear microscopy it had pooled sensitivity of 89% and specificity of 99%. So, it can be considered more reliable when compared to microscopy and faster when compared to culture.

There are other interesting cases as well. Hope it gives you a good reading experience as always.

Dr K Jayakrishnan

A rare case of STUMP !

Dr Revathy Panicker

22 year old nulliparous Mrs X was referred to KJK Hospital after she was detected to have a single large IMF of size 10 X 9 cm for laparoscopic myomectomy. She had complaints of polymenorrhea for last 1 year. She had no associated dysmenorrhea. On evaluation she was detected to have a fibroid. She had no known comorbidities. On examination, per abdomen - no significant mass was palpable. While in Bimanual examination - uterus was enlarged to 12 weeks size with a mass palpable posteriorly. TVS picture showed Uterus 9.3 x 12.2 x 9.8 cm with a large posterior wall fibroid of size 10 x 10 cm. (Intra mural fibroid becoming Subserous). Fibroid was pushing the endometrium anteriorly .Moderate increase in vascularity-more of venous flow was noted. Bilateral ovaries showed polycystic appearance. Patient was taken up for laparoscopic myomectomy after pre anaesthetic fitness. Intraoperatively - There was a large posterior wall fibroid seen. Vasopressin injected and myomectomy initiated. Fibroid appeared degenerated and profuse bleeding from the myoma bed was noted which could not be controlled laparoscopically and henceforth the procedure was converted to open surgery. Mutliple Venous sites were noted and profuse bleeding occurred from the same during the procedure. Multiple Hemostatic sutures were applied to control the bleeding. Post operatively on follow up the HPR was suggestive of Smooth Muscle tumour of uncertain malignant potential.

Discussion

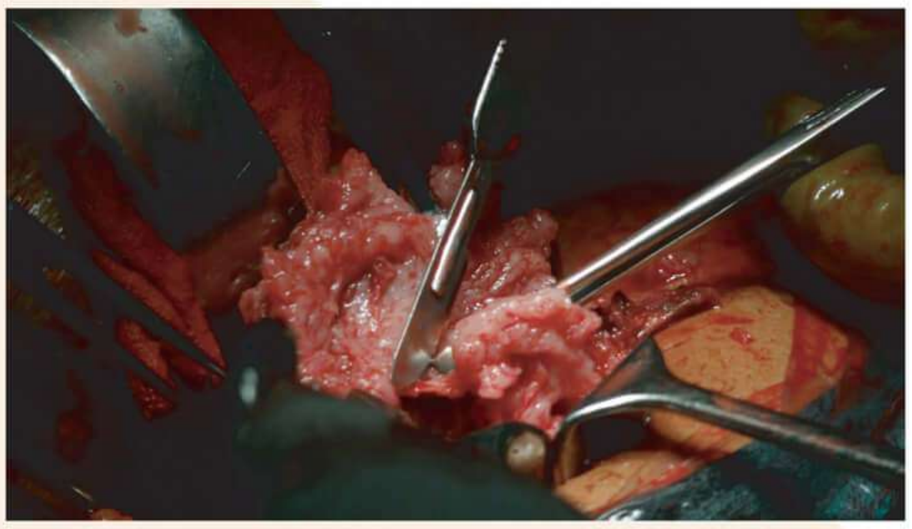
- Uterine smooth muscle tumors (SMTs) have historically been distinct in benign leiomyomas and malignant leiomyosarcomas on the basis of cytological atypia, mitotic rate and presence or absence of tumor cell necrosis.

- Current World Health Organization classification indicates that a uterine SMT not diagnosed unequivocally as benign or malignant should be defined as STUMP.

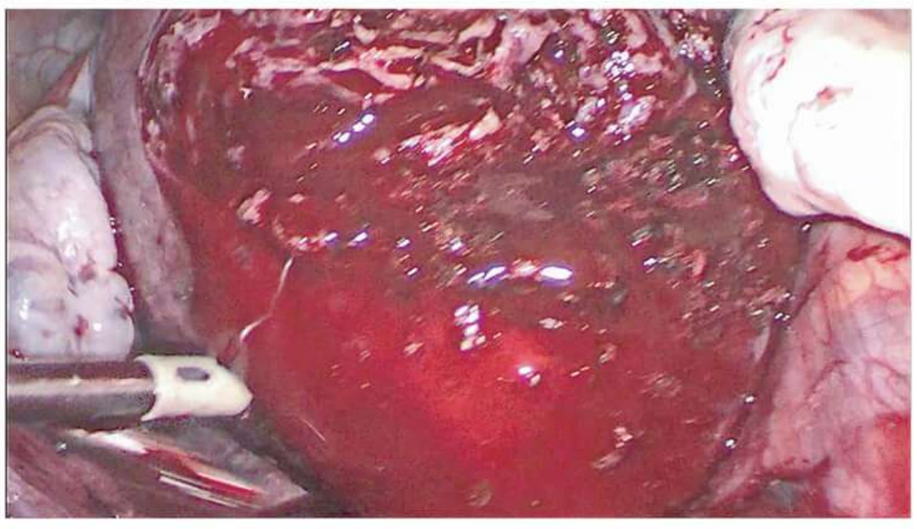
- The reported STUMP recurrence rate ranges between 8.7% and 11%, but poor data is available in the Literature. It is plausible that SMTs defined as STUMPs may be variants of leiomyomas with unusual pathologic features. In the event of STUMP diagnosis in myomectomy specimens, considering the proved possibility of recurrence, hysterectomy represents the gold standard for those women who have completed their childbearing.

- Successful pregnancies following fertility sparing surgery have been reported however these patients should be adequately informed of the risk of recurrence and a strict follow-up program through clinical and imaging techniques is mandatory.

- Moreover neither demographic features (age, ethnicity, tobacco use) nor routine oncological serum markers (CA125 and He4) are predictive of recurrence of disease.



Open Myomectomy



Profuse bleeding while attempting Lap-myomectomy

HUGE PARATUBAL
SEROUS CYSTADENOMA IN A YOUNG PATIENT

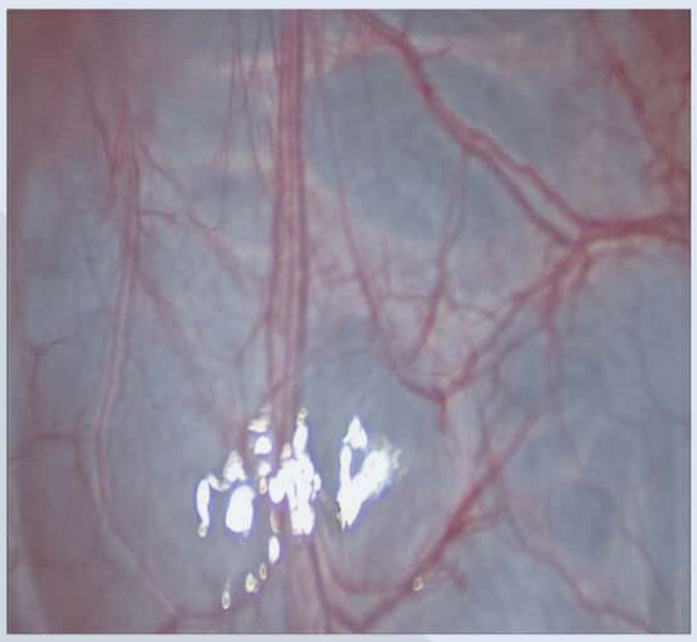
Dr Surbhi Gupta

14-year-old unmarried female with complaints of dysmenorrhea, abdominal discomfort and abdominal lump since 2-3 months admitted for evaluation. On clinical examination, mobile mass with cystic consistency of approximately 20-week size, arising from pelvis noted. All tumour markers were within normal limits. USG and MRI Abdomen were suggestive of normal sized uterus and ovaries. A large well-defined cystic Space Occupying Lesion 13cm X14cm X8 cm seen filling pelvis and extending superiorly up to the umbilical region with no solid areas or abnormal vascularity. Both ovaries displaced to left side. Inferior displacement of urinary bladder with left posterolateral displacement of uterus also noted. Pre-operative diagnosis of benign mesenteric cyst made.

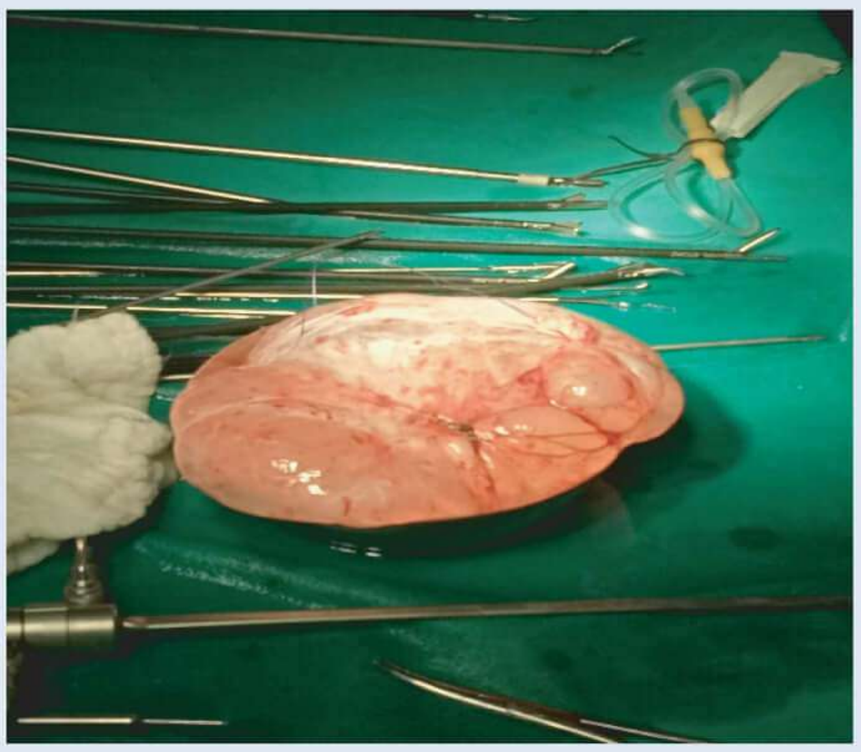
At laparoscopy, the uterus was normal, a mass measuring 20cm X18 cm arising from right mesosalpinx confirmed as a Para ovarian cyst because both ovaries and tubes were intact and separate from the mass. The cyst was identified as paramesonephric in origin. On histological examination, cyst was lined by single layer of ciliated columnar epithelium with fibro-collagenous wall suggesting it to be tubal in nature, Hence histopathological diagnosis of paratubal serous cystadenoma was made.

Discussion- Para-tubal cysts and Para-ovarian cysts are epithelium lined fluid filled cysts in the adnexa adjacent to the fallopian tube and ovary. The terms are used interchangeably. These originate from the mesothelium and are presumed to be the remnants of the mullerian duct and Wolffian duct. Para tubal cystadenomas have been reported in all female age groups. These cysts constitute about 10% of adnexal masses.

These are typically unilateral and although large tumours can cause pelvic pain, they rarely cause internal haemorrhage, torsion or rupture. These are generally benign, but may, on rare occasions, give rise to borderline tumours and malignancies. Management depends on the size and symptoms. Smaller lesions can be followed expectantly. Larger lesions, that are growing or symptomatic are surgically explored and removed.



Large right para-tubal cyst



Specimen of cyst retrieved

OVARIOPEXY - A SOLUTION FOR TORSION-DETORSION SYNDROME?

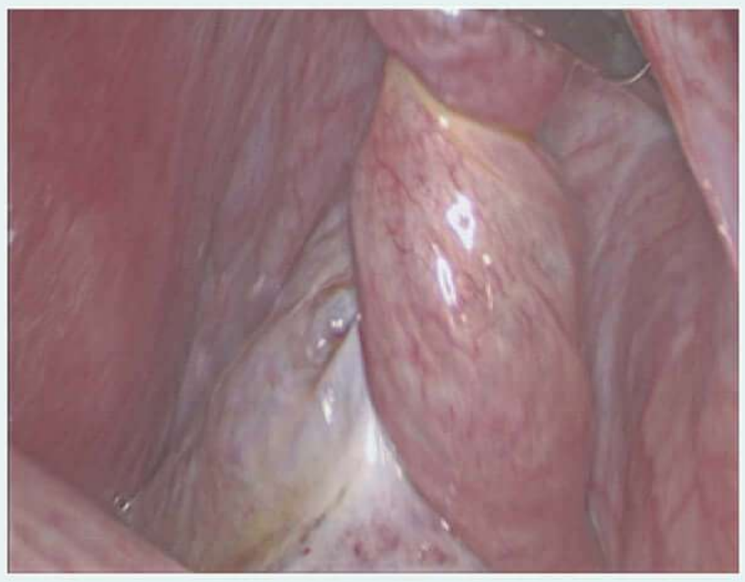
Dr DANU C

22 years old, single lady came to our OPD with complaints of right sided abdominal pain and vomiting. She gave history of multiple episodes of similar illness necessitating inpatient care every 6-7 months for the past 2 years. She had regular cycles with normal flow. 5yrs back, she underwent Operative Laparoscopy at another hospital for Right ovarian torsion (Detorsion + multiple cyst puncture).

3yrs after surgery, she had 4 admissions. Many ultrasound scans and two CT scans were done for her. She was diagnosed with Torsion- Detorsion Syndrome, but was managed with medications. In our hospital, USS showed enlarged right ovary-5cm with thick walled cystic lesion with internal echoes-2cm. Vascularity maintained in both ovaries.

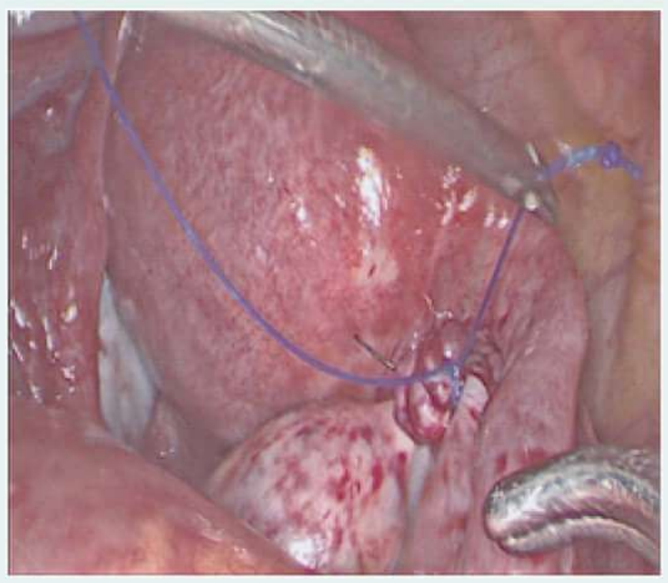
Operative Laparoscopy was planned in view of recurrent Torsion-Detorsion Syndrome. Right ovary and tube were twisted twice on their pedicle. Right ovary was enlarged with a hemorrhagic cyst-2cm. Colour of ovary and tube was normal. Both ovarian pedicles were long. Detorsion and right ovarian cystectomy was done. Bilateral ovariopexy was done by plicating utero-ovarian ligaments with 3-0 vicryl and reinforced with 1-0 prolene. Post-operatively, she did not have any complaints.

DISCUSSION :- Ovarian torsion is the partial or complete rotation of ovary and portion of fallopian tube upon the supplying vascular pedicle. Incidence is about 2.7%. Spontaneous detorsion may occur which is relatively common. Ovarian torsion is a gynaecological emergency and will require urgent surgical intervention to prevent ovarian necrosis. Ovarian torsion is usually associated with a cyst or tumour. USS is the primary modality for evaluation of ovarian torsion. Approximately, 60% of torsion occurs on right side. Among fertile women, the incidence of retorsion is about 28%. Traditionally, surgery has involved partial or complete oophorectomy or salpingo-oophorectomy. Prompt intervention to preserve ovarian function should be laparoscopic whenever possible and detorsion the treatment of choice in prepubescent girls and women of reproductive age group. In older females, oophorectomy is done.



Right adnexal torsion

Laparoscopic ovariopexy should be considered in all females with evidence of recurrent torsion; including children and adolescents. Ovariopexy can be done either by plicating the utero-ovarian ligament or by fixing the ovary to the posterior aspect of uterus or posterior aspect of broad ligament or to the pelvic side walls with a non absorbable suture material like prolene or ethibond. A combined approach like plication and fixing the ovary to uterus is also been described. The best method of ovariopexy remains unresolved. In cases where torsion has occurred in the presence of true ovarian cyst, cystectomy at the time of surgery may be risky due to friable nature of the tissues; but early elective cystectomy has been described after an interval of 2-3 weeks to allow time for edema and congestion to resolve. Based on observational studies, detorsion and fixation of ovary is a safe procedure that ensures maintenance of ovarian function and reduces the risk of recurrence.

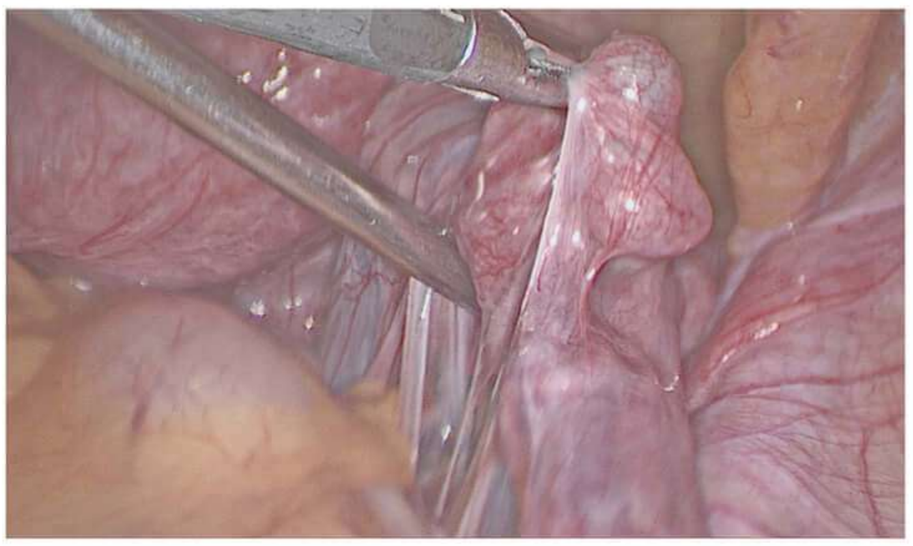


Right ovarian ligament plication

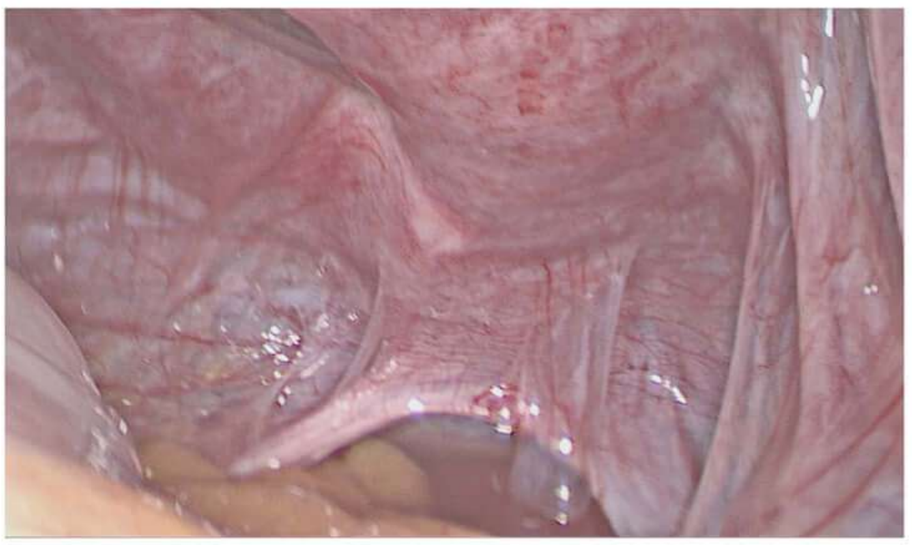
PELVIC TUBERCULOSIS - A SILENT DISEASE

Dr Ashwin Jayakrishnan

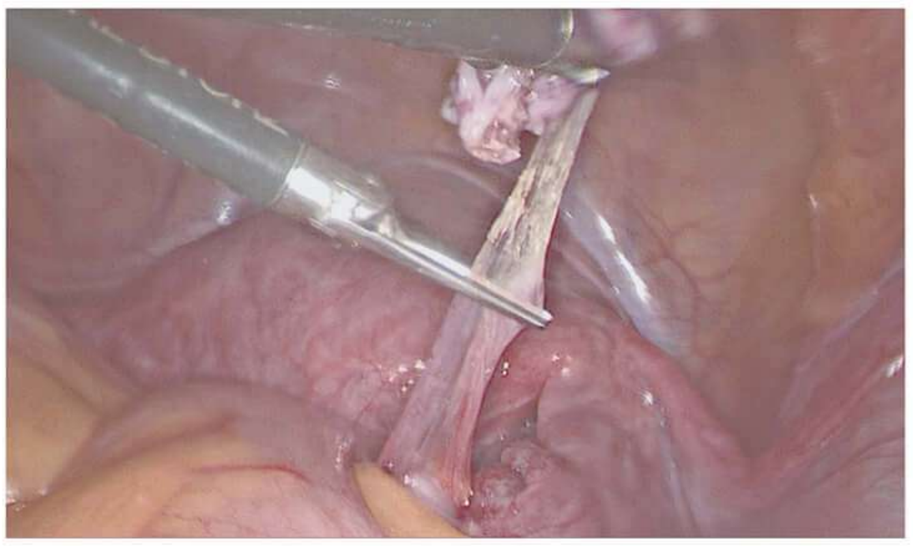
31 year old Mrs X, who was an IT professional reported to us in KJK Hospital. She was married for 5 years .She had a history of irregular cycles since menarche. She was a known c/o hypothyroidism on thryoxine tablets. As a part of her initial evaluation her ultrasound scan showed the presence of bilateral polycystic ovaries. No other significant findings in the ultrasound .Also her husband semen analysis parameteres were within normal limits. She had undergone 3 cycles of ovulation induction and 5 cycles of IUI at our centre over a 2 year period since her work required her to be out of station occasionally. Due to the previously failed IUI she was posted for a diagnostic hysterolap on 03/03/2017. On hysteroscopy her endometrium appeared unusually thinned out ,while both ostia were visualised and found to be normal. Endometrial sampling was done. Diagnostic laparoscopy showed a normal sized uterus with flimsy adhesions present over the serosal surface, along with bilateral peritubal and periovarian adhesions. No perihepatic adhesions were present. Adhesiolysis was done bilaterally and tissue was sent for TB culture and Gene Xpert study which can identify mycobacterium tuberculosis at a molecular level, along with the endometrial sample. As suspected mycobacterium tuberculosis was detected by Gene Xpert without rifampacin resistance. The patient was referred to a pulmonologist for opinion and was placed on antituberculous therapy for 6 months.



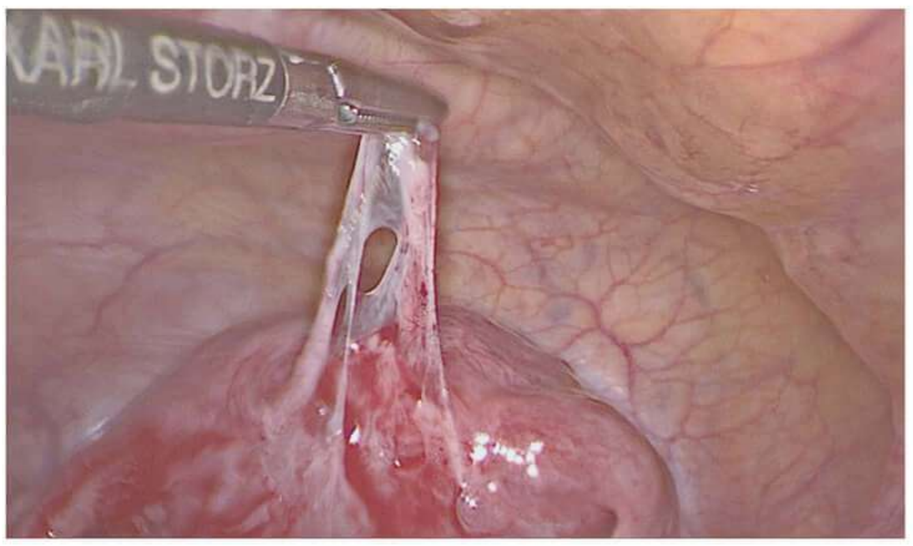
Bilateral flimsy peri ovarian and peritubal adhesions



Adhesion present over POD



Bilateral peritubal and periovarian adhesions released



Flimsy adhesions over uterine serosa sent for HPE

Discussion

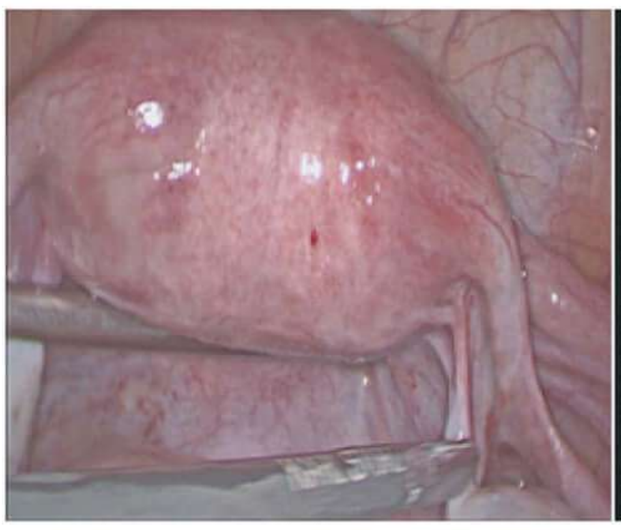
Although genital TB can occur in any age group, the majority of patients are in the reproductive age group, 75% being in the 20-45 years age bracket. Genital TB may be asymptomatic and the majority of women are diagnosed during investigations for infertility. Systemic constitutional symptoms of weight loss,feeling unwell and night sweats may be present. In the acute phase, the picture may resemble classical acute pelvic inflammatory disease (PID) with pelvic pain, fever and vaginal discharge. Fitz-Hugh Curtis syndrome may result from tuberculous PID. Genital TB may present Diagnosis is achieved most effectively through a combination of a high index of suspicion, especially in areas of low prevalence, thorough initial clinical assessment and the use of appropriate investigations. High risk factors include a history of previous pulmonary TB infection, contact with a pulmonary TB sufferer, recent travel to or migration from high prevalence countries, residence in high prevalence areas, low socioeconomic background, drug abuse, HIV positive status and history of chronic chest symptoms, night sweats and weight loss. Tuberculosis should be considered in a woman with high risk factors presenting with unexplained infertility, amenorrhea not explained by other causes, pelvic infection that does not respond to ordinary treatment and, in postmenopausal women with bleeding, persistent leucorrhoea and pyometra where endometrial neoplasia has been excluded.

SEPTATE UTERUS- DIAGNOSIS AND MANAGEMENT:

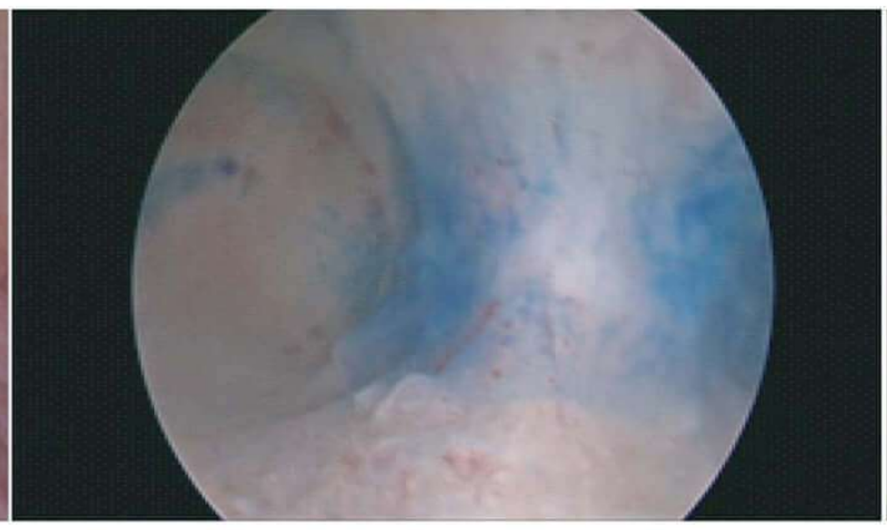
Dr. Preeti Chavan

25yrs old A3,referred to us with h/o recurrent pregnancy loss and USG showed bicornuate uterus. She has been married for 3 yrs. Her menstrual history was normal. She has 3 early first trimester miscarriages. During her first pregnancy, she was diagnosed to have uterine septum or bicornuate uterus but not evaluated. APLA work up done here, found to be normal.

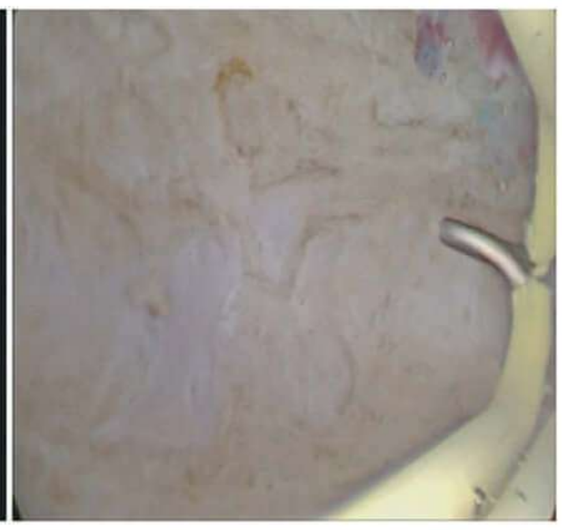
Here, USG findings showed normal sized uterus and ovaries. 3D s/o widely separated 2 endometrial cavities- ?Bicornuate uterus or ?Septate uterus. Proceeded with operative hysterolaparoscopy, found to have uterus with broad fundus. B/L tubes and ovaries were normal. Endometriotic deposits seen on the posterior surface of uterus and same cauterised. Hysteroscopy picture was s/o subseptate uterus (extending upto 1/3rd of the cavity)-same resected using collins knife bipolar cautery.



Lap-broad uterine fundus



Hysteroscopy-Uterine septum



Septal resection

Discussion:

In female embryo, the mullerian ducts give rise to the fallopian tubes,uterus and upper portion of the vagina.The uterus is developed from fusion and canalization of the vertical parts of the mullerian ducts in the midline.At first ,because of the presence of an incomplete septum this fusion is incomplete. As the uterine development progresses,this septum reabsorbes and uterus with a single cavity forms. Any abnormalities in this process can result in the range of known mullerian anomalies like septate uterus. Uterine anomalies are related to an increased risk of miscarriage,premature birth and fetal loss.

An incidence of uterine defect in general population is 4.3% & it increases to 5%-25% in women with recurrent pregnancy loss.The septate uterus,accounting for about 55% of Mullerian duct anomalies,is commonest form of structural uterine anomaly & has the highest reproductive failure rate.

Grimbizis et al, reported that 12(26.1%) out of their 40 infertile patients with septate uterus has lapro findings of endometriosis.It seems possible that septate uterus may be involved in the pathogenesis of endometriosis & there by may have an indirect relationship with fertility.

In conclusion,the diagnosis of septate uterus can be achieved with 3D USG, hysteroscopy, MRI but hysterolaparoscopy which is the gold standard. Hysteroscopic septal resection is the surgery of choice, which decreases the rate of miscarriage for such women greatly.

Case Report- Submucosal uterine leiomyomatous polyp

Dr Abhilash Antony V

Case presentation -

A 40-year-old multiparous woman presented with a history of heavy menstrual bleeding with signs and symptoms of anaemia. She was evaluated from outside and was advised hormonal treatement and parentreal iron supplementation for correction of anaemia. No family history of endometrial cancer or other gynaecological malignancy.

On examination, the abdomen was soft and non-tender. Speculum examination revealed a smooth round-shaped mass, measuring 4 cm × 3 cm, protruding through external cervical os. Bimanual pelvic examination revealed bulky uterus with protruding submucous leiomyomatous polyp with normal adenexa.

Investigation results include Hb-8.2 g% and other blood parameters were within normal range. Trans vaginal ultrasonogram showed multiple fibroid uterus 3.2x 3.8 cm submucousfiboid, fundal subserous fibroid of 4cmx4cm noted without any degenerative changes and morphologically normal ovaries.

After correcting anaemia with blood transfusion and taking endometrial sampling, patient was taken up for hysteroscopic myomectomy of submucousfibroid. Hysteroscopy revealed a bilobed submucous leiomyoma arising from anterior wall.

Discussion -

Uterine fibroids, also known as leiomyoma or myomas, are benign (noncancerous) tumors of the muscular wall of the uterus. They are the most common tumor of the female genital tract and affect 1 in 3 women older than 35 years of age. Fibroids are classified according to their location within the uterine wall. Submucous or submucosal fibroids occur just under the endometrial lining of the uterine cavity. Intramural fibroids occur in the muscular wall. Subserosal fibroids occur under the outside covering of the uterus. Pedunculated fibroids occur on a stalk, project from the surface of the uterus and can be confused with ovarian masses. They can project from the inner lining of the uterus and even extend through the cervix.

Various classifications are for Submucous fibroid likes Lasmar's pre surgical classification, STEP-W classification and Wamsteker's classification among this most commonly used is hysteroscopic classification-

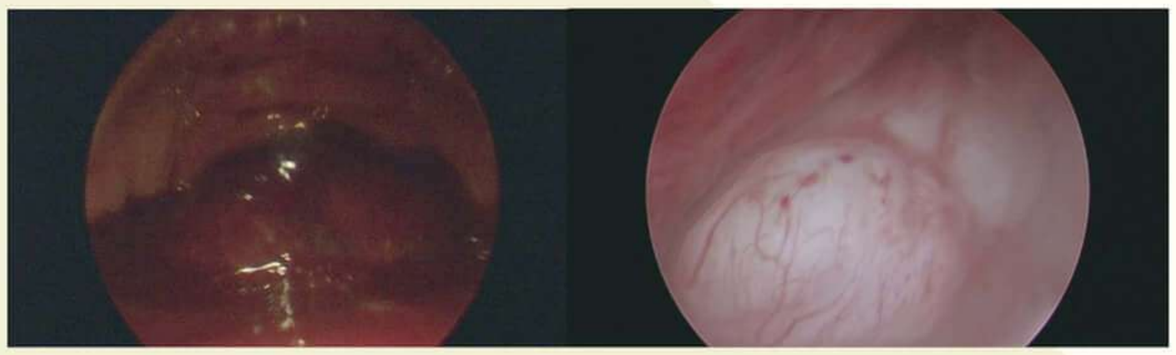
Wamsteker'sclassification

Type 0- fibroid totallyin the cavity.

Type 1- More than 50% in the cavity,

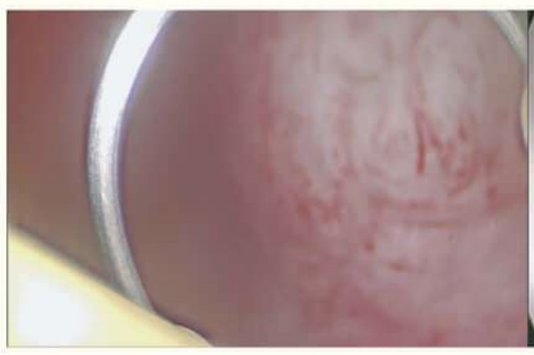
Type 2- Less than 50% in the cavity.

Symptoms are often associated with larger fibroids and include heavy menstrual bleeding, anaemia, dysmenorrhoea, pressure effects, urinary urgency and subfertility.Differential diagnoses include cervical and endometrial polyps, neoplasia and uterine fibroid prolapsing through the cervix. Possible complications of unrecognised and/or untreated submucosal pedunculated uterine fibroid prolapsed into the vagina are torsion, necrosis and uterine inversion (chronic or acute). Hysteroscopic myomectomy currently represents the standard minimally invasive surgical procedure for treating submucous fibroids. By using instrument called resectoscope, leiomyoma is removed.

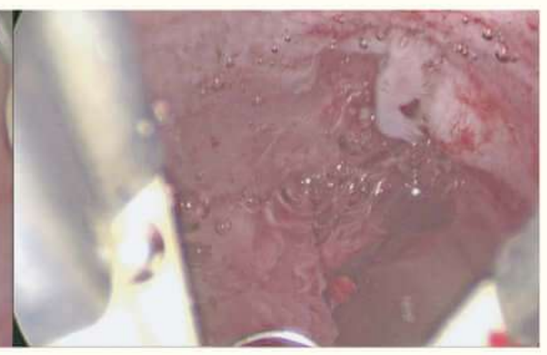


Leiomyoma protruding through cervix

SMF with 2 lobes



Resection of SMF with wire loop



Cavity after resection of SMF

STATISTICS

Jan. - Mar. 2017

TOTAL SURGICAL PROCEDURE	260
TOTAL LAPAROSCOPY	67
OPERATIVE LAPAROSCOPY	54
DIAGNOSTIC LAPAROSCOPY	13
TOTAL HYSTEROSCOPY	75
DIAGNOSTIC HYSTEROSCOPY	63
OPERATIVE HYSTEROSCOPY	12
HYSTEROSCOPIC PROCEDURES	
SEPTUM RESECTION	5
ENDOMETRIAL CAVITY COLLECTION	1
SMF RESECTION	4
POLYPECTOMY	2
LAPAROSCOPIC PROCEDURE	
TLH	6
TLH WITH BSO	4
TLH+ RSO+SALPHINGECTOMY	2
LAP MYOMECTOMY	16
LAP STERILISATION	3
OVARIAN CYSTECTOMY	7
ADENENOMYOMECTOMY	3
PARA OARIAN CYSTECTOMY	1
OVARIOPEXY	1
SURGERY FOR ECTOPIC	
SALPHINGECTOMY	7
SALPHINGOSTOMY	1
SURGERY FOR ENDOMETRISIS	
CHOCLATE CYSTECTOMY	3
OTHER MAJOR SURGERY	
TAH	2
MYOMECTOMY	4
MINOR PROCEDURE	39
SUCTION EVACUATION	10
CERVICAL ENCIRCLAGE	20
MIRENA INSERTION	3
AMNIOCENTESIS	2
FRACTIONAL CURRETING	3
EUA	1
OBSTERTRICS	
TOTAL DELIVERY	73
LSCS	56
FTND	17
MALE SURGERY	
TESA/PESA	10
CONCEPTION +IUI STATISTICS	
TOTAL CONCEPTION	119
TOTAL IUI CONCEPTION	16
IUI CONCEPTION %	12.75 %
SPONATANEOUS	14
COH ONLY	14
IVF / ICSI STATISTICS	
TOTAL NO OF CASES	75
FROZEN ET	27
TOTAL CONCEPTION RATE AFTER FROZEN ET-	32 %

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