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

From the Editors Desk.....

Greetings to all....

Christmas season is on and this year we are back with our 17th annual workshop of KJK Hospital. This year we are up to reminisce on the ART proceedings and procedures. Before I get into the excerpts of the same I would first of all like to share with you my experience in the Aagl Congress this year held at Washington DC.
The theme of this year's meeting was to enhance minimally invasive gynecological surgery through quality, patient safety and innovation. What it meant was to focus on improving patient outcomes through a patient centered approach that balances both innovation and technology as well as quality and safety. Building a world class training programme "Teach the teacher" course helped in planning your surgical strategy and much more.

Our news letter this time has quite a few interesting articles. One of special mention is the PRP instillation procedure we carried out for one of our patients planned for embryo transfer. Increase in endometrial thickness after instillation of PRP suggest that intra uterine infusion of PRP represents a novel strategy for thin endometrium with poor response to convention therapy. As supported by many research articles, this is indeed one of our flag bearing approach to the ever spoken idea of evidence based medicine.

Learning new things is not always easy but it will always keep you sharp and to the edge. Though it is a known fact it is almost always neglected. So it's time to sit up and refresh with the all new learning experience hosted by KJK Hospital, which I'm sure will keep you sharp and focused. Reminding you once again that the expert in anything was once a beginner.

Dr. K. Jayakrishnan at **Annual Meeting** of AAGL - Washington DC

Hoping to meet you all on the 17th of December...

A CASE OF UTERINE AV MALFORMATION - A RARE CAUSE OF ABNORMAL UTERINE BLEEDING

Dr Aswin Jayakrishann

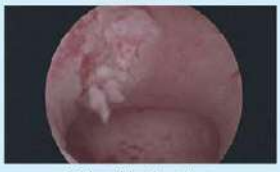
CASE : 23 year old Mrs A presented with complaints of menorrhagia of 2 years duration since the time of her last child birth by caesarean section. She had been prescribed various medications including antifibrinolytics and hormonal medication to reduce her bleeding but to no avail as her complaints persisted. She reported to us where in a repeat ultrasound was done which showed a uterus of 6.3 x 4.2cm along with an endometrial polyp /submucous fibroid of 1.7x1.6cm and normal ovaries. Diagnostic hysteroscopy showed the presence of polypoidal endometrium without the presence of any intrauterine pathology. A repeat ultrasound was then done which showed the presence of an anechoic area within the posterior myometrium with a low resistance high velocity flow pattern on colour Doppler giving rise to the suspicion of an arteriovenous malformation and required an angiogram for confirmation.

DISCUSSION

Uterine arteriovenous malformation (AVM) is not a common entity with a predicted rough incidence of about 4.5% as quoted by O'Brein et al. Exact incidence is notknown. AVM may present as a rare cause of menorrhagia or abnormal uterine bleeding. It should be considered in patients with profuse or torrential genital bleeding and in refractory cases of menorrhagia not responding to conventional measures. AVM can be diagnosed by color Doppler, CT, MRI& Angiography. Angiography is the gold standard for diagnosis. Catheter angiography and embolization are very effective in defining the vascular anatomy and treating uterine vascular abnormalities. In the past hysterectomy was the only remedy. Recent reports have mentioned successful conservative management such as long term hormonal therapy, surgical removal of AVM or laparoscopic bipolar coagulation of the uterine arteries.

1. Normal endometrial cavity

2. Both ostia seen



3. Polypoidal endometrium- biopsy taken

4. Intraoperative USS-AV malformation seen

5. A hyperechoic area with increased vascularity 1.3 x 1.3 cm seen in the posterior wall -AV malformation

LAPAROSCOPIC SACROCOLPOPEXY - AN OVERVIEW

Dr Revathy Panicker

64 year old Mrs X, status post hysterectomy (Vaginal) reported with c/o mass desending per vaginum, on evaluation she was diagnosed with 3rd degree vault prolapse with cystocele and rectocele. After pre op evaluation and counseling patient was taken up for laparoscopic sacrocolpopexy with anterior colporrhaphy and posterior colpoperiniorrhaphy. The procedure was carried out, Patient had a fast post op recovery and was discharged on day 4

Over View

After a hysterectomy the top of the vagina, where the neck of the womb (cervix) used to be, is called the vault. The vaginal vault can sag down, known as a vault prolapse. Sacrocolpopexy can be performed as an open technique and laparoscopic technique. A laparoscopic sacrocolpopexy operation involves supporting the vaginal vault using a piece of permanent artificial mesh material. One end of the mesh is sewn onto the vagina and the other is attached to the sacrum bone using titanium staples. The operation is performed via laparoscopy

Fig-1 .Mesh fixed to sacral promontory using non absorbable tackers

It is a technique with demonstrated success in the setting of vaginal vault prolapse as well as multi-compartment pelvic organ prolapse. Subjective success rates range from 74% to 98%.

Benefits of the laparoscopic approach include a shorter hospital stay and faster recovery. Its efficacy appears to be comparable to the abdominal approach and both laparoscopic and abdominal approaches have surpassed vaginally assisted techniques by virtue of maintaining vaginal length and limiting postoperative dyspareunia.

Fig 2 .Both the limbs of the mesh attached to anterior and posterior aspects of the vault

The technique involves 3 basic steps - Pelvic exposure, identifying the sacral promontory, perirectal disection, placement of the mesh (Y shaped) the anterior 2 ends of it being stiched to the vault and tail being fixed to the sacral promontory using tacker (a kind of staple device).

Advantages of the procedure include minimal bleeding, early post operative recovery, minimal post operative pain and associated complications.

Sacrocolpopexy should be a relatively straightforward procedure for the experienced laparoscopist. A sound anatomical knowledge and experienced hand are the keystones to a succesful laparoscopic sacrocolpopexy procedure. However the disadvantages include, mesh erosion and infection. Identifying the correct planes is essential for a bloodless dissection and a mesh free from haematoma. Furthermore, careful identification of the correct pararectal plane will avoid the risk of neurovascular damage to the rectum

A CASE OF RECURRENT MULTIPLE DERMOID CYSTS

Dr. Aiswarya Reddy

Mrs. X, aged 32 years, P1 L1, presented to our OPD for secondary infertility management. She did not have any menstrual complaints. Her menstrual cycles were regular, bleeding lasts for 4 days, once in 30 days.

She has a history of Hysteroscopic polypectomy and right salpingectomy in January 2010 at KJK hospital. Intra operatively, dense adhesions were seen engulfing the ovaries and tubes, due which she was adviced ART following surgery. She also has a history of Right ovarian cystectomy in October 2011 at KJK hospital. HPE report showed the specimen as Benign cystic teratoma ovary. She underwent IVF procedure following the surgery. She conceived by ICSI in 2012, baby was delivered by LSCS. 2 embryos were transferred and 4 embryos were frozen for future use.

Presently, she wanted to try for the next pregnancy. Embryo transfer with frozen embryos was planned. On evaluation, transvaginal ultrasonography showed a bilateral dermoid cysts of about 4 cm size. Routine blood and urine examination was normal. She was posted for laparoscopic right ovarian cystectomy at KJK hospital.

Intra operatively, right ovary was adherent to uterus and lateral pelvic wall, and was enlarged with 2 dermoids, of 4 cm and 3 cm size. Left ovary was enlarged with 3 dermoids, each of about 3 cm size. POD was partially obliterated with bowel adhesions. Adhesiolysis and bilateral ovarian cystectomy were done and specimen were retrieved through an endobag, sent for HPE. HPE report showed it as mature cystic teratoma. Patient was counseled regarding the recurrent nature of dermoid, and proceeded with embryo transfer after preparing the endometrium.

Bilateral large ovarian cysts

Dermoids excised and retrieved through an endobag

DISCUSSION

Introduction : Dermoid cysts account for 95 % of the germ cell tumours. They are also known as benign cystic teratomas. Of all cystic tumours of ovary, 5-10 % are dermoids. A dermoid cyst is usually unilocular with smooth surface, seldom attaining more than 15 cm in diameter. It contains sebaceous material and hair, and the wall is lined in part by squamous epithelium which contains hair follicles and sebaceous glands. Teeth, bone, cartilage, thyroid tissue and bronchial mucous membrane are often found in the wall.

Multiple dermoid cysts in the same ovary are well recognized and it is not uncommon to find 2-3 separate dermoids. Extraovarian dermoid cysts arise occasionally in the lumbar region, uterovesical area, parasacral region and rectovaginal septum. Combined tumours tend to arise in patients between the ages of 20 and 30 years, while simple dermoid cysts have a maximum age incidence between 40 and 50 years. Tumours may, however, arise at any age. The increasing levels of estrogen and progesterone may explain the increase in size of dermoids after puberty, and their arrested growth after menopause.

Dermoids are usually unilateral, they are bilateral in 12-15%. They are usually slow growing, with an estimated growth rate of 1.8 mm per year, although some have been shown to grow more rapidly. The long term recurrence rate following surgical excision is 4.2 %. According to Harada et al., young age (<30 years), large cyst (diameter>8 cm), and bilateral occurrence are predictive risk factors for recurrence, with the risk of recurrence being especially high in the presence of more than one of these factors. Cases involving two post surgical recurrences and a shift from unilateral to bilateral ovarian involvement are rare.

Dermoid cysts are innocent ovarian tumours but epidermoid carcinoma occurs in 1.7 % and sarcomatous changes have been described. Usually, a squamous cell carcinoma develops from the ectodermal tissues but mammary carcinomas and malignant thyroid tumours have also been described. Immature teratomas are very rare and they are mostly solid. Most of them are malignant tumours because of sarcomatous change, but about 20% are innocent.

Clinical features : In adult patients, dermoids are often detected incidentally during routine imaging procedures or during abdominal or pelvic surgeries performed for other reasons. Most of the cases (64.5 %) are asymptomatic. However, in children and adolescents, they may show different clinical manifestations such as abdominal pain and distention, caused by tumour torsion or ligament irritation.

Investigations : Ultrasonography and tumour markers, such as CA 125, CA 19-9, and AFP, are common tools used for the early detection and characterization of ovarian masses, such as mature or immature teratomas. Serum CA 19-9 is the most reliable biomarker of ovarian mature cystic teratomas; higher levels are correlated with larger tumour sizes. However, the diagnostic value of CA 19-9 in patients with mature cystic tumours is low when used alone. Clinically, serum CA 125 is still used to distinguish between benign and malignant pelvic masses.

Management : For most patients with dermoid cysts, laparoscopic or laparotomic surgical excision can provide a definitive diagnosis, afford symptom relief, and prevent complications. Laparoscopic management of ovarian tumours is a potentially safer alternative for younger women in whom fertility preservation is a desired outcome. The reported incidence of post surgical recurrence on the same ovary is 3-4 %. Previously, the contralateral ovary was also recommended for biopsy during surgery, but this procedure is no longer indicated due to the availability of accurate sonographic imaging.

Conclusion : In order to prevent recurrent disease, routine checking of the contralateral ovary during surgical resection of a recurrent lesion is necessary. To increase the likelihood of detecting recurrent disease, frequent (every 3 months), post operative pelvic sonographic examinations of both ovaries are also necessary in patients at high risk of recurrence.

LARGE FIBROID UTERUS TACKLED LAPAROSCOPICALLY

Dr Abhilash Antony V

Hysterectomy remains the most common major gynaecological operation worldwide. It may be carried out by three different routes and its variations: vaginal, abdominal, and laparoscopic. With the advances of laparoscopic technology, equipment, and training, hysterectomies are increasingly performed laparoscopically. The laparoscopic hysterectomy was firstly performed by Reich et al. When compared to the open surgery, laparoscopic technique has more advantages with regard to less intraoperative blood loss, decreased length of hospitalization, faster convalescence, fewer complications, less postoperative adhesion formation, and less scar formation. The laparoscopic hysterectomy can be categorized into three main types including laparoscopic assisted vaginal hysterectomy (LAVH), laparoscopic supra cervical hysterectomy (LSH), and total laparoscopic hysterectomy (TLH).

CASE REPORT

A 47-year-old parous woman (previous lower segment caesarean section) came with complaints of heavy menstrual bleeding and was diagnosed to have fibroid uterus. She is K/C/O of type 2 DM on insulin and hypothyroid with body mass index (BMI) 27 kg/m2. The gynaecological examination showed a uterus irregularly enlarged up to 28 week size. Combined transvaginal/transabdominal ultrasonography was performed showing multiple fibroids and left unilocular ovarian cyst without any radiological features of malignancy and normal right adnexa. Blood tests excluded anaemia (haemoglobin was 13.1 g/dl) and tumour markers were negative.

Considering the presence of fibroids and heavy menstrual bleeding, the patient was proposed for total laparoscopic hysterectomy with left salpingooophorectomy with preservation of the right ovary after explaining the risk of conversion to laparotomy.

The surgical procedure was performed in a lithotomic position, under general anaesthesia. A Clermont Ferrand uterine manipulator was inserted transvaginally before beginning the operation and removed after colpotomy. Initially, pneumoperitoneum was created by introducing Veress needle. One 10 mm supra umbilical port and subsequently three additional 5 mm lateral ports were inserted. Uterus was enlarged up to 28 week with multiple fibroids with larger sub serous fibroid up to 15 cm. Right adnexa normal. Left ovary and tubes not separately made out, Left adnexa containing unilocular cyst around 10 cm. Recto sigmoid was adherent to posterior surface of uterus and to the left adenexa. Bladder pulled up. Pouch of Douglas partially obliterated with bowel adhesions.

Vasopressin injected in to myoma bed and with difficulty right cornual structures coagulated and cut using Ligasure. Right ovary retained, proceeded to uterovesical fold dissection. Stenting with illuminated stent of left ureter done due to difficult visualisation in order to avoid ureteric injury. Rectosigmoid adhesiolysis done. Left adnexa along with ovary and tube removed and proceeded to colpotomy with monopolar needle. Specimen retrieved partially through 15 mm Rotocut morcellator and partially through vagina. By using no-l vicryl Lap suturing of vault done. Bowel and bladder integrity checked at the end of procedure. Specimen weighed around 1800 gm. An intraperitoneal drain was placed, which was removed on postoperative day 2. Total blood loss was less than 300 ml and the whole surgical time was around 3 hours. The patient had an uneventful postoperative stay and was discharged from hospital four days after surgery.

Haemoglobin level on that day of discharge was 12.2 g/dl. At 1-month follow-up the patient reported no complications after discharge and a prompt recovery.

Fibroid uterus 28 week size

Cutting of cornual structures

Morcellation

Vault closure

DISCUSSION

Nowadays, TLH is currently accepted as a feasible and safe way for the treatment of benign uterine pathology as an acceptable alternative to standard abdominal hysterectomy. However, most studies set arbitrarily as a limit of uterine size the equivalent of 15-16 weeks of gestation to make a uterus suitable for laparoscopic surgery. A large uterus will lead to several surgical difficulties during laparoscopic hysterectomy, such as limited operative field, restrictive instrument range of motion, and difficult removal of the specimen. The large uterus are often associated with higher risk of complications and morbidities, such as prolonged operation time and excessive bleeding.

Several modifications to the current technique for TLH for huge uterus. The key modifications consists of in higher insertion of the optic trocar with consideration of open abdominal entry to minimize the risk of lacerating the uterus. However, this makes it comfortable for the surgeon to operate. The optic cannula should be placed at least 8-10 cm above the umbilicus and the 30-degree optic can ensure better visualization of uterine pedicles. The middle cannula should be placed through the umbilicus or even higher, while the other two lateral ones should be placed according to uterine size and location of myomas. The uterine manipulator has a pivotal role in cases of very large uteri to optimize the exposure of structures (vessels and ligaments) and can significantly reduce the operating time. In fact, the main challenge is securing uterine vessels. In selected cases, ligation or suturing may reduce the blood supply to the uterus before performing bipolar coagulation, reducing the risk of haemorrhage and ureteral injury. However, these procedures are for selected cases only. Transection of the vaginal cuff can be performed vaginally or laparoscopically; however, better visualization of pelvic anatomic structures is obtained by laparoscopy, resulting in a safer procedure.

BICORNUATE BICOLLIS UTERUS WITH VAGINAL SEPTUM

Dr. DANU C

A 23y old lady with regular cycles presented to us with 4y of primary infertility and a scan report of Bicornuate uterus and bilateral polycystic ovaries. She had done Laparoscopy + Hysteroscopy at another hospital & was diagnosed as having Bicornuate uterus with non-communicating left rudimentary horn. Her blood investigations and husband's Semen analysis were within normal limits. She had undergone IVF once, which failed. On examination, a longitudinal vaginal septum was seen extending from external os upto the middle third of vagina. MRI scan showed Bicornuate bicollis uterus with longitudinal vaginal septum extending upto vaginal orifice, bilateral PCO & left renal agenesis with ectopic blind ending ureter.

We posted her for Laparoscopy + Hysteroscopy. Vaginal septum was incised using monopolar electrocautery. Two cervical openings could be seen. Hysteroscope introduced through both the openings without difficulty. Right cavity appeared larger compared to left. Both ostia were seen separately. On Laparoscopy, uterus was fused partially. 2 horns visualised; separate at the fundus and fused towards the lower half. Right horn appeared more developed. Bilateral PCO puncturing and fulguration of minimal endometriotic deposits were done. On chromopertubation, delayed spill on both sides were present. Her final diagnosis of Mullerian duct anomaly was Bicornuate bicollis uterus with longitudinal non-obstructing vaginal septum - Class U3a C2 V1 (ESHRE-ESGE classification).

	Uterine anomaly		Cervical / Vaginal anomaly	
	Main class	*Sub-class*	*Co-existent class*	
U0	Normal uterus		C0	*Normal cervix*
U1	Dysmorphic uterus	a. T-shaped b. Infantilis c. Others	C1	*Septate cervix*
U2	Septate uterus	a. Partial b. Complete	C2	*Double "normal" cervix*
U3	Bicorporeal uterus	a. Partial b. Complete c. Bicorporeal septate	C3	*Unilateral cervical aplasia*
U4	Hemi-uterus	a. With rudimentary cavity (communicating or not horn) b. Without rudimentary cavity (horn without cavity / no horn)	C4	*Cervical Aplasia*
U5	Aplastic	a. With rudimentary cavity (bi- or unilateral horn) b. Without rudimentary cavity (bi- or unilateral uterine remnants / Aplasia)	V0	*Normal vagina*
U6	Unclassified Malformations		V1	*Longitudinal non-obstructing vaginal septum*
			V2	*Longitudinal obstructing vaginal septum*
			V3	*Transverse vaginal septum and/or imperforate hymen*
			V4	*Vaginal aplasia*

ESHRE/ESGE classification

Bicornuate uterus

Vaginal septum

DISCUSSION:

The incidence of Mullerian Duct Anomalies is around 0.1-3.5%. Patients present with menstrual disorders, infertility or obstetric complications. These are associated with functioning ovaries and age-appropriate external genitalia, but many have associated renal, skeletal, lower gastrointestinal or cardiac anomaly. Bicornuate uteri are thought to represent ~25% of Mullerian anomalies. Women with bicornuate uterus usually have no difficulty in becoming pregnant; but the pregnancy may result in spontaneous abortion (28%), preterm birth (25%), malpresentations or deformities in the offspring.

There are 2 major classification systems for Mullerian Duct Anomalies - American Fertility Society (AFS) classification and European Society of Human Reproduction and Embryology and European Society for Gynaecological Endoscopy (ESHRE/ESGE) classification.

Bicornuate uterus can be diagnosed with ultrasonography during luteal phase of menstrual cycle. But it has limitations in distinguishing bicornuate from septate uterus. The reported accuracy of HSG in differentiating these 2 conditions is only 55%. MRI can distinguish these two conditions to a certain extend. If the intercornual angle is >105°, it favours bicornuate uterus. If the angle is <75°, the diagnosis is most likely septate uterus. The gray area is when the angle is between 75° and 105°. In this case, Laparoscopy + Hysteroscopy should be considered.

An accurate diagnosis should be rendered because their treatment strategies & reproductive outcomes markedly differ. Bicornuate uterus does not usually require surgery & is associated with minimal reproductive problems; while septate uterus can be surgically corrected & has a high association with reproductive failure. Metroplasty should be reserved for women who have recurrent spontaneous abortion, midtrimester loss, premature birth & in whom no other etiology has been identified. Strassman procedure is the surgery of choice for unifying bicornuate uterus, but is seldom required.

PLATELET RICH PLASMA INSTILLATION FOR POOR ENDOMETRIAL DEVELOPMENT

Dr Rajini S.

CASE : Ms. X, 21 years, presented to KJK Hospital with secondary amenorrhoea in 2012. On evaluation FSH was elevated (28miu/ml) and the patient was diagnosed to have premature ovarian failure. She was started on cyclical oral contraceptive pills. She got married in 2015 and the couple was advised In vitro fertilisation with oocyte donor program (IVF+ODP).

In view of Right hydrosalpinx and recurrent endometrial collection, she underwent Lap Right Salpingectomy and delinking of Left tube and was planned for Frozen Embryo Transfer. 3 embryos were frozen. But on further scans endometrial cavity was seen to be distended with poor endometrial development inspite of endometrial preparation with estradiol, sildenafil and aspirin, and 2 cycles had to be cancelled. Following that she again underwent operative hysteroscopy- Bilateral ostia coagulation and endometrial sampling for TB was done. TB PCR result was negative. The 3rd cycle also had to be cancelled due to poor endometrial development.

Thin Endometrium prior to PRP instillation

Better Endometrial development & vascularity Post PRP instillation

Hence she was planned for Autologous Platelet rich plasma instillation for endometrial preparation along with local application of serially increasing dose of oestrogel. On 29th day of oestrodiol application, (ET-5.4 mm, zone -II), PRP 2ml was instilled intrauterine under USS guidance with antibiotic cover. Endometrial Thickness was monitored and was seen to gradually increase. 2 more PRP instillations were done similarly on alternate days and endometrial thickness increased to 7.2 mm, zone II. Progesterone supplementation was started and FET was done successfully after 4 days.

DISCUSSION : Endometrial thickness is an important clinical marker of endometrial receptivity. Thin endometrium is an important cause for cycle cancellation and deferring embryo transfer leading to financial and mental stress to the couple.

Poor endometrial development may be due to iatrogenic causes like Asherman's Syndrome, clomiphene, long term ocp use or due to infections like TB, PID or idiopathic.

An endometrial thickness of at least 7 mm is considered essential for successful implantation. For this the endometrium is prepared using various modalities like Estradiol (oral/ vaginal/ patches/ s/c implants) in serially increasing doses, Low dose aspirin, Sildenafil citrate, Vitamin E, L- arginine, intrauterine administration of bone marrow stem and progenitor cells, G-CSF infusion, Acupuncture, PRP instillation.

PRP/Platelet rich plasma is defined as a plasma fraction of autologous blood with concentration of platelets 4-5 times above normal. It is prepared from the patient's venous blood which is anticoagulated, double centrifuged and platelet activated. 0.5 -1 ml of PRP is instilled intrauterine using Tomcat catheter. Platelets secrete large number of cytokines and growth factors including VEGF, TGF, PDGF, EGF etc intensely within the 1 st 1 hour of administration itself and its action continues at least for another 7 days leading to cell proliferation, angiogenesis, cell migration resulting in tissue regeneration.

A pilot study by S R Tandulwadkar et al on 68 women with sub optimal endometrial growth and repeated cycle cancellations, showed significant increase in endometrial thickness and vascularity with 60.93% positive b HCG rates and 45.31% clinical pregnancy rates after intrauterine prp instillation prior to FET. Another study by Yajie Chang et al on 5 women with thin endometrium resulted in successful embryo transfer and pregnancy in all of them post prp instillation.

PRP is widely used now in sports medicine for faster healing of injuries, hair loss treatment, osteoarthritis, post traumatic scars. In ART a lot of scope is seen for its use in recurrent implantation failure, poor endometrial receptivity and for ovarian rejuvenation in Premature Ovarian Failure.

Dr. K. Jayakrishnan with Prof Linda Bradley - Round table Luncheon (Annual Meeting of **AAGL - Washington DC)**

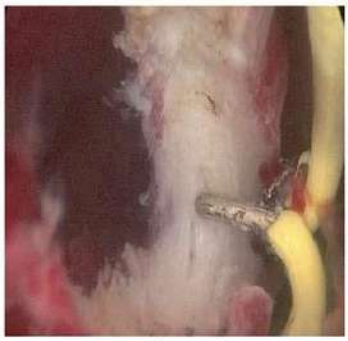
PRE- CONCEPTION LAPAROSCOPIC TRANS ABDOMINAL CERCLAGE

Dr Susrutha

CASE : A 35 year old woman with history of 2 spontaneous mid trimester miscarriage was planned to be taken up for laparoscopic trans abdominal cerclage. She had bilateral poly cystic ovaries and Mullerian anomaly- class V, complete longitudinal vaginal septum and septate uterus for which she had underwent operative laparoscopy and operative hysteroscopy with PCO puncturing and septal resection in 2009 in a local hospital.

Operative laparoscopy and operative hysteroscopy done in 2011 in our hospital. The uterine septum was completely resected.

She conceived twice after treatment with oral ovulogens and gonadotropins, but had mid trimester miscarriage in both pregnancies even with encerclage done transvaginally. The First was at 23 weeks, its twin gestation and the second was at 18 weeks, it's a singleton pregnancy and encerclage was done after NT scan in both pregnancies.



septal resection

INDICATIONS - LTAC :

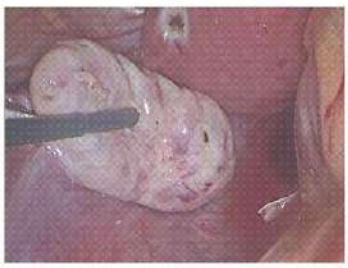
1) Shortened Cervix as in uterine anomaly
2) Post cone biopsy
3) Irregular cervix from obstetric trauma
4) History of preterm delivery
5) Fetal loss even with transvaginal cerclage

DISCUSSION :

Cervical incompetence is defined as inability of uterine cervix to retain a pregnancy in the second trimester, in the absence of contractions as outlined by ACOG. Cervical incompetence is estimated to complicate between 0.1% to 2% of all pregnancies and accounts for 15 % of habitual preterm deliveries between 16 and 28 weeks of gestation.

In 1965, Laparoscopic transabdominal cerclage (LTAC) was first described by Benson and Durfee, has emerged as a safe and effective intervention.

LTAC is a procedure where suture is placed around the cervix at its uppermost part at the cervico-uterine transition where the uterine isthmus forms. The advantage of transabdominal over transvaginal approach includes more proximal placement of at the internal os. Davis et.al found less preterm premature rupture of membranes in women who underwent abdominal cerclage versus transvaginal for treatment of cervical incompetence. (8% vs 29%, p=0.03, May 2012).



PCO puncturing

Ideally, it is to be performed preconception due to the physiological advantages of a small minimally vascular uterus, and absence of fetal risks where manipulations can be performed readily and safely. The Patient should be counselled regarding that after conception, there is need of elective cesarean. As our patient fulfilled all the above criteria and hence after all routine investigations and counseling she was posted for Laparoscopic trans abdominal surgery.

She underwent the procedure on 12/09/17 after excluding pregnancy and was discharged 24 hours after procedure and had an uneventful post operative period, suggested her to try for conception the next cycle.

Residual septum

The NICE guidelines mention few studies showing the success of laparoscopic cerclage has preventing miscarriages and increaseing in live birth rates.

CONCLUSION:

Laparoscopic encerclage is feasible during and in between pregnancies in congenitally malformed uteri.

This procedure can be suggested in selected cases of cervical insufficiency with short cervices.

LTAC

The decision on whether to do LTAC procedure in a women with risk of recurrent mid-trimester pregnancy loss or extreme preterm birth should be individualised, either by virtue of their medical history or ultrasound findings of a short or dilated cervix.

One should also take into consideration the expertise of the clinical team and the woman's wishes.

STATISTICS

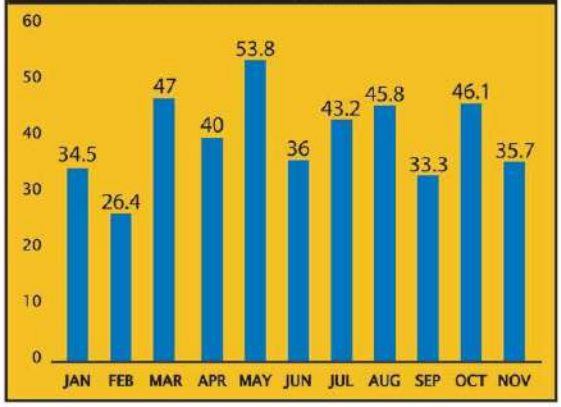
JANUARY TO NOVEMBER 2017

TOTAL SURGICAL PROCEDURES	984
TOTAL LAPAROSCOPY	263
TOTAL HYSTEROSCOPY	260
DIAGNOSTIC HYSTEROSCOPY	221
OPERATIVE HYSTEROSCOPY	39
HYSTEROSCOPIC PROCEDURES	
SEPTAL RESECTION	14
SMF RESECTION	8
POLYPECTOMY	10
ENDOMETRIAL SAMPLING	6
ADHESIOLYSIS	1
LAPAROSCOPIC PROCEDURE	
TLH	22
TLH WITH BSO	17
TLH+ RSO	6
TLH+ LSO	1
LAP MYOMECTOMY	51
LAP STERILIZATION	6
OVARIAN CYSTECTOMY	51
ADENENOMYOMECTOMY	6
PARA OVARIAN CYSTECTOMY	3
LAP CERCLAGE	1
LAP TUBAL RECANALIZATION	3
B/LOVARIOLYSIS +ADHESIOLYSIS	3
PARA TUBAL CYSTECTOMY	3
PCO DRILLING	21
LAVH+SALPINGECTOMY+ ANTERIOR COLPORRAPHY	1
LAVH+BSO	1
OVARIOPEXY	1
LAP COLPOPEXY	1
RESIDUAL OVARIAN SYNDROME	2

SURGERY FOR ECTOPIC	
SALPHINGECTOMY	17
SALPHINGOSTOMY	6
SURGERY FOR ENDOMETRISIS	
CHOCOLATE CYSTECTOMY	30
FULGURATION OF ENDOMETRIAL DEPOSITS	38
OTHER MAJOR SURGERY	
MYOMECTOMY	6
VAULT REPAIR	1
VH+PFR	1
TAH	2
TAH + BSO	1
ADENOMYOMECTOMY+ ENDOMETRIOTIC CYSTECTOMY	1
MINOR PROCEDURE	155
SUCTION EVACUATION	43
CERVICAL ENCIRCLAGE	75
MIRENA INSERTION	6
AMNIOCENTESIS	4
FRACTIONAL CURRETING	8
ERA	3
COLPOSCOPY	1
EUA	2
OBSTERTRICS	
TOTAL DELIVERY	276
LSCS	200
FTND	55
VACUUM DELIVERY	21
MALE SURGERY	
TESA/PESA	41
VARICOCELECTOMY	1

ONCEPTION + IUI STATISTICS	
TOTAL CONCEPTION	305
TOTAL IUI CONCEPTION	65
IUI CONCEPTION	16 %
SPONTANEOUS	57
COH ONLY	69
IVF / ICSI STATISTICS	
TOTAL NO OF CASES	327
FROZEN ET	107
CONCEPTION THROUGH IVF	117
IVF CONCEPTION RATE	40 %
FET CONCEPTIONS	48
CONCEPTION RATE AFTER FROZEN ET	45.7 %

IVF CONCEPTION RATES 2017



Our Team

REPRODUCTIVE MEDICINE, OBSTETRICS & GYNAECOLOGY
Dr. K.JAYAKRISHNAN MD, DGO, DNB
Chief Infertility Specialist & Laparoscopy Surgeon

Dr. ANITHA M. MBBS, DNB
IVF Co-ordinator

Dr. NIRANJANA JAYAKRISHNAN
MD, (OBG), DNB
Consultant in Reproductive Medicine

SENIOR CONSULTANT OBS & GYN
Dr. BINDU BALAKRISHNAN MD, DGO
Dr. DEEPTI B. MS, DGO, MRCOG

CONSULTANT IN OBS & GYN
Dr. ASHWIN JAYAKRISHNAN MD (OBG) DNB
Dr. REVATHY PANICKER MBBS, DGO
Dr. ABHILASH ANTONY V. MBBS, DGO
Dr. DANU MS (OBG)
Dr. Rajani S. MBBS, DGO

ANAESTHESIOLOGY
Prof. Dr. PREMA BAI MD, DA
Chief Anaesthesiologist
Dr. UNNIKRISHNAN S. MD (PG), DA, FIMSA
Senior Consultant Anaesthesiologist
Dr. APARNA SUDARSAN MBBS, DA, DNB
Consultant Anaesthesiologist

PAEDIATRICS
Dr. MADHU K.V. MD, DCH
Dr. SUNIL KUMAR K.B. MBBS, DCH

RADIOLOGY/SONOLOGY
Dr. R.N.RAMESH DMRD

EMBRYOLOGIST
Dr. JAYAPRAKASH D. Phd

PATHOLOGIST
Dr. JAYASREE P.V. MD

UROLOGIST
Dr.VINOD K.V. MS, MCH (URO)

CONSULTANT SURGEON
Dr. J.PADMAKUMAR MS. MCH

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