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NEWS LETTER

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Medical Negligence and the New Criminal Law Codes

New legal changes: Will doctors experience real relief or is it just a rehash of existing rules?

Editorial

Dear Colleagues,

Last month,Home Minister dropped a significant policy bombshell in the parliament. Doctors have been handed a lifeline, as they're now off the hook for criminal prosecution in cases of death due to negligence. But wait, there's a twist in the tale. According to the Bharatiya Nyaya (Second) Sanhita (BNSS), the ambitious successor to the Indian Penal Code, the story isn't all rosy for the medical fraternity. If they err, they still face the prospect of up to two years in prison or a fine. That's milder than the five-year term recommended for other negligence-induced fatalities. It has stirred up a hornet's nest, raising critical questions about where to draw the line between professional error and criminal negligence. In this legal and ethical quagmire, the debate is just beginning.

"Despite contrary statements appearing in the media about the bill with regard to Section 106 (dealing with rash or negligent homicide) of Bhartiya Nyaya (second) Sanhitha, 2023, only the punishment has been reduced from 5 years to 2 years along with fine.

According to a report , in September 2023 the IMA made a submission to the Parliamentary Standing Committee on the BNSS. "According to the submission, the IMA reported around 98,000 deaths per year due to medical negligence in contrast with 52 lakh medical negligence cases filed against doctors. Further, the IMA also asked that a law criminalising violence against doctors be included in the BNSS since "75% of doctors and paramedics face violence as per IMA," states the report.

"Earlier if there was any unexpected outcome of treatment due to an oversight or an act of omission by the doctor it was categorised as a non-culpable homicide with up to 5 years of imprisonment. This was very harsh as doctors are not criminals and no doctor ever wants to harm his/her patients. Treating them as murderers was doing great injustice to them. Many times this was misused for extracting compensation as the actual mishap was a known complication of the disease and its treatment.

With the proposed amendment, such an offence has been made "cognizable" and "bailable". Also the central government has introduced an official amendment that says "If such an act is done by a registered medical practitioner while performing a medical procedure, he shall be punished with imprisonment of either description for a term which may extend to two years and shall also be liable to fine." With this a long-standing wish of doctors to decriminalise them has been fulfilled,"

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Unveiling the Enigma of Ovarian Endometrioma

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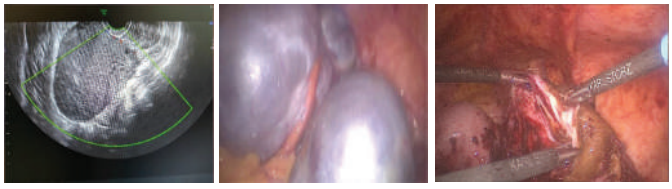
Endometriosis is a benign, chronic, estrogen-dependent condition which is defined by the **presence ofendometrial glands and stroma outside the uterine cavity**, mostly in the ovaries and pelvic peritoneum. It is a disease of high socio-economic impact, affecting 10% of women of reproductive age and 20-30% of the infertile female population. 3 main subtypes of endometriosis are- Peritoneal lesions, Deep endometriosis and ovarian endometriotic cysts. Endometriomas are the most commonly diagnosed form because of the relative ease and accuracy of ultrasound diagnosis and are reported in 17–44% of women with endometriosis.

Case Report

A 31-year-old, nulliparous patient presented with chief complaints of severe dysmenorrhea not getting relieved by medical management. TVS was performed which revealed right ovarian endometriotic cyst with ''ground-glass" echogenicity. MRI revealed huge Tubo-ovarian endometriotic cyst measuring 14 x 13 cm with multiple adhesions. As the patient was symptomatic, an informed decision was made to proceed with laparoscopic ovarian cystectomy. Preoperatively AMH was checked which was 1.67 ng/ml. Intra operatively dense omental adhesions noted between sigmoid colon and endometriotic cyst. POD was completely obliterated. Proceeded with adhesiolysis followed by cystectomy.

A.USG showing large endometriotic cyst B. Intraoperative image showing endometriotic cyst and cystectomy



Intraoperative considerations

1.Multiple incisions and excessive opening should be avoided to prevent damaging the ovarian cortex, functional ovarian tissue and hilum.

2.To aid dissection and identification of cyst wall, dilute vasopressin can be injected under the cyst capsule with an additional advantage of reduced bleeding during cyst removal.

3.Careful identification of the cleavage plane and precise spot bipolar coagulation is the key to achieve hemostasis, to prevent unnecessary damage to healthy tissue, and to avoid blind or excessive diathermy.

4.Final hemostasiscan be achieved by Bipolar coagulation, suturingor intra-ovarian hemostatic sealant agents may also be used for this purpose.

5.Consider using anti-adhesion measures such as oxidized regenerated cellulose, polytetrafluoroethylene surgical membraneand hyaluronic acid products, as these may be beneficial in reducing post-operative adhesion formation.

Discussion

The management of endometriosis-related infertility is still a challenging issue.Medical treatment for endometrioma includes mainly hormonal therapy with progestogens, dienogest, LNG-IUS, COCs, aromatase inhibitors and gonadotropin-releasing hormone analogues. Surgery aims at increasing the chances of natural conception and has the beneficial effect of relieving symptoms. Surgical treatment includes cyst aspiration, laparoscopic ovarian cystectomy, plasma energy and laser ablation.The presence of endometrioma reduces ovarian reserve; however, its surgical management is likely to accentuate the decline. The risk increases for woman with large, recurrent or bilateral endometriomas hence measurement of AMH prior to ovarian surgery has to be considered. Endometrioma surgery carries the risks of 2.4% postsurgical ovarian failure and 30.4% disease recurrence.**ESHRE recommends cystectomy instead of drainage and coagulation,** as cystectomy results in improved rates of pain resolution, reduced recurrence rates and improved spontaneous conception compared to ablative approaches.**ASRM suggests that multiple surgical procedures should be avoided because of adhesions and reduction of ovarian reserve.**All the guidelines recommend laparoscopic surgery in preference to laparotomy for chronic pain of endometriosis and infertility, because of less pain, shorter duration of hospitalization, quicker recovery and better cosmetic result.

Following are the clinical recommendations that should be followed during laparoscopic cystectomy:

Anatomical considerations - The ovary receives its blood supply from ovarian artery and an anastomosis between ovarian artery and ascending branch of the uterine artery in the ovarian ligament. Thus, the larger intra-ovarian vessels are found in the hilum at the insertion of the mesovarium.
The surgeon needs to possess skills to avoid excessive bleeding that can lead to destruction of healthy ovarian tissue through cauterization and disruption of ovarian blood supply.

General recommendations-1. Assess the possible extent of disease- size, number and location (unilateral or bilateral) before surgery. **2.** Meticulous pre-operative planning should include: pelvic USG (or MRI)- presence of endometriotic nodules, hydrosalpinx, hydronephrosis and extent of POD obliteration. **3.** Ovarian reserve tests (AFC, AMH) when future fertility is a concern. **4.** Assess serum tumour markers in case of suspicion of malignancy at imaging. **5.** Obtain appropriate consent from the woman before surgery- possible risk of reduced ovarian reserve.

Conclusion

Surgical treatment of endometrioma can be challenging and therefore require a great experience and expertise of the surgeon.Preoperative USG/ MRI for diagnosis, judicious use of vasopressin, staying in the right plane, minimising use of electrocautery will help to perform surgery without complications and overall decline in ovarian reserve.

Thalassaemia in Pregnancy. Case Report

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Mrs. X 30 years old primigravida with IVF conception of 31 weeks 1 day, with normal hemoglobin till 28 weeks presented with Low haemoglobin (Hb-8.8 gm%) which was not getting corrected with oral or intravenous Iron correction. She was evaluated for anaemia-PBS-Microcytic Hypochromia picture. Iron studies showed (S.Ferritin- 782ng/ml,high,S.Iron- 136 mcg/dl, TIBC-355 mcg/dl, Saturation%- 38 %) and decided to do electrophoresis which showed Beta Thalassaemia trait (Haemoglobin A-83%,low,Hemoglobin A2 6.5 %,High).Husband electrophoresis was normal. ECHO evaluation done. Physician and Cardiology consultation done for the patient.Iron stopped for the patient. Current Hb -9 gm. Patient planned for admission at 36 weeks and give blood transfusion. Ultrasound scans showed normal Foetal growth and other parameters.Patient undergoing regular ANC check-up and follow up in our hospital.

Discussion: Introduction

The basic defect in the thalassaemia syndromes is reduced globin chain synthesis leading to extravascular haemolysis (damaged red blood cells and erythroid precursors)and high degree of ineffective erythropoiesis. Thalassaemia major (homozygous â thalassaemia) results from the inheritance of a defective â globin gene from each parent. This results in a severe transfusion-dependent anaemia. The heterozygous state, â thalassaemia trait (thalassaemia minor) causes mild to moderate microcytic anaemia with no significant detrimental effect on overall health.

Thalassaemia is associated with an increased risk of maternal cardiomyopathy due to iron overload and fetal growth restriction (FGR). In late or un diagnosed thalassaemia major women may develop new endocrinopathies like diabetes mellitus, hypothyroidism and hypoparathyroidism due to the increasing iron burden.

Management

The multidisciplinary team should include an obstetrician, diabetologist and cardiologist .The pattern of care should be individualised depending on the degree of end-organ damage. Cardiac assessment is important to determine cardiac function and possible further iron chelation as well as planning for labour. Thyroid function should be determined periodically throughout pregnancy and if hypothyroid the dose of thyroxine altered.All chelation therapy should be regarded as potentially teratogenic in the first trimester.Desferrioxaminecan be used safely after 20 weeks of gestation at low doses. All bisphosphonates are contraindicated in pregnancy and should ideally be discontinued 3 months prior to conception. Diabetes is common and good glycaemic control is essential in pre pregnancyand pregnancy. S.Fructosamine is preferred for monitoring (HbA1c is not a reliable marker) glycaemic control. Cardiac status of the woman to be assessed in pregnancy as well as in pregnancy to determine the severity of any iron-related cardiomyopathy. Cholelithiasis is common due to the underlying haemolytic anaemia and they may develop cholecystitis in pregnancy. So, liver iron concentration and ultrasound abdomen to be done. For blood transfusion, haemoglobin should be monitored after 2 to 3 weeks and a 2-unit transfusion administered if the haemoglobin has fallen below 10 g/dl. Each woman's haemoglobin falls at different rates after transfusion so close surveillance of pretransfusion haemoglobin concentrations is required. Women with thalassaemia have a much higher demand for folic acid so high-dose supplementation is needed. Folic acid 5 mg daily should be commenced 3 months prior to conception. Women should be offered an early scan at 7–9 weeks of gestation. In addition to the routine first trimester scan (11–14 weeks of gestation) and a detailed anomaly scan at 18–20+6 weeks of gestation, women should be offered serial fetal biometry scans every 4 weeks from 24 weeks of gestation.

At the time of labour, Senior midwifery, obstetric, anaesthetic and haematology staff should be present. 2 units of blood should be cross-matched and kept ready. In women with thalassaemia major intravenous desferrioxamine 2 g over 24 hours should be administered for the duration of labour. Continuous intrapartum electronic fetal monitoring should be instituted. Thalassaemia in itself is not an indication for caesarean section. Active management of the third stage of labour is recommended to minimise blood loss. Women with thalassaemia should be considered at high risk for venous thromboembolism. Women should receive low-molecular-weight heparin prophylaxis while in hospital for 7 days post discharge following vaginal delivery or for 6 weeks following caesarean section. Breastfeeding is safe and should be encouraged.

Conclusion

The haemoglobinopathies encompass a complex collection of red blood cell disorders that are responsible for considerable morbidity and mortality in women and their unborn children.So a comprehensive guidelines should be followed during preconceptual, antenatal, intrapartum and postnatal management and contraception in both primary and secondary care settings.Women with thalassaemia should be reviewed monthly until 28 weeks of gestation and fortnightly thereafter.

MCA Doppler as a Predictor of Fetal Anemia

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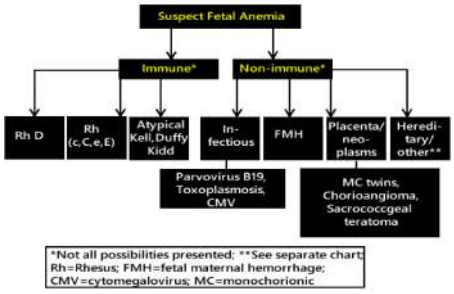
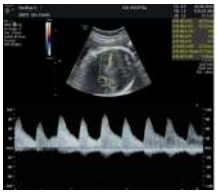
Mrs S G2A1, FET conception,DCDA twins,Rh Positive, NT scan-Normal,Double marker-Negative, Anomaly scan- Normal,Growth scan at 28 weeks- Normal. On follow up Growth scan at 33 weeksby radiologist showed Fetus A MCA PSV of 0.88 MoM and Fetus BMCA PSV-1.8 MoMs suggestive of severe fetal anemia and no evidence of IUGR. Possibility of false positive MCA PSV has been discussed and no other USG features of fetal anemia was noted. ICT, Torch panel came as negative.Antenatal corticosteroids coverage was given with two doses of Betamethasone. Repeat MCA PSV doppler done by fetal medicine specialist after three days confirmed the same findings. Chorionicity was confirmed again. Patient was extensively counseled about the chances of false positive MCA PSV and need for intrauterine transfusion if fetal anemia is confirmed. Also the rare chance of TAPS in DCDA twins is also explained. Patient was referred to a tertiary care center with level 3 NICU set up in case of need for IUT. Repeat scan done there also showed raised MoMin Fetus B and there emergency LSCS was done in view of suspected severe fetal anemia in Fetus B. Postnatally baby had no anemia and both babies are doing well.

Background

Fetal anemia is a rare and life-threatening condition for the developing fetus. As fetal hemoglobin (Hb) values increase gradually with advancing gestation, anemia may be classified based on the degree of Hb deviation from the mean for gestational age (GA) or on multiples of the median (MoM) for GA. Hydrops usually does not develop until the Hb deficit is >70 g/L or the absolute Hb value is <50 g/L or fetal hematocrit <30%. Fetal anemia occurs as a fetal manifestation due to an underlying etiology which is difficult to diagnose prenatally and needs a multidisciplinary team approach for a precise diagnosis and appropriate parental counseling.

Etiology- Immune and Nonimmune Causes





MCA PSV in diagnosis of fetal anemia

The MCA-PSV does not have a strong correlation with fetal Hb concentration but the decrease in fetal Hb level can be determined by MCA-PSV. The sensitivity of a single value of MCA-PSV is reported to be nearly 100% for moderate or severe anemia with a false-positive rate of 12%. The serial monitoring of the MCA-PSV may decrease the false-positive rate to <5%. MCA-PSV >1.5 MoM of gestation is suggestive of fetal anemia and is an indication to do FBS and IUT. In fetuses at risk of fetal anemia, MCA-PSV monitoring is ideally started from 18 to 20 weeks of gestation as it provides technical consideration to perform FBS and IUT. After 20 weeks of gestation, routine testing is usually done on a fortnightly basis but may be done more frequently with higher MoM levels or other abnormal ultrasound findings that are suggestive of developing anemia.

Approach to Fetal Anemia

Maternal

Family and pregnancy history (e.g., ethnicity, consanguinity, Genetic syndromes, Infection exposure, and trauma), Complete blood count, Blood group and screen (indirect Coombs titer if antibody screen+), Kleihauer–Betke test, Flow cytometry, Hb electrophoresis, and Serologies [PB-19 IgG and IgM, CMV IgG and IgM (avidity testing if IgM+), Toxoplasmosis IgG and IgM, syphilis testing].

Fetal

Detailed fetal structural evaluation and placental ultrasound, MCA-PSV Doppler, Fetal echocardiogram if Hydrops, FBS, blood type, Hb, Hematocrit, Platelet count, Direct Coombs, Reticulocyte count and Total bilirubin, PCR for CMV and PB 19 with or without syphilis and toxoplasmosis, Peripheral smear, Nonstress test for sinusoidal fetal heart rate pattern.

Approach to Rare Causes of Fetal Anemia

Genetic counseling, Parental-Hb, High-performance liquid chromatography and RBC enzyme assays (i.e., pyruvate kinase, G6PD), Fetal-peripheral smear, Hb electrophoresis, and Chromosome fragility studies (i.e., Fanconi anemia). If elevated white blood cell count—Differential and Peripheral smear to rule out Congenital leukemia or Transient myeloproliferative disorder.

Sonographic Features of Fetal Anemia

The general survey, evaluate for secondary causes (i.e., fetal or placental) of anemia, Hydrops, Ascites, Placentomegaly (placental thickness >2 SD above GA mean 28 or >18 mm at 12–15 weeks or >30 mm at 18–21 weeks), Cardiomegaly: CTR >0.5 before18 weeks or >0.52 after 18 weeks and congenital infections- placentomegaly, hepatosplenomegaly, echogenic bowel, liver calcifications, ventriculomegaly, intracranial calcifications, and growth restriction. Complications of Monochorionic twins- TAPS discordant MCA-PSV (>1.5 MoM in donor and <0.8 MoM in recipient), Discordant placental echogenicity, “Starry sky” appearance of the liver in recipient, and specific clinical condition, such as, á-Thalassemia major.

Conclusion

Noninvasive MCA-PSV Doppler predicts fetal anemia accurately. But possibility of false positive results should always be explained to the patient and serial monitoring of MCA PSV can decrease the false positive rates. Early diagnosis and effective management of fetal anemia can prevent fetal and neonatal complications.

Rare case of Mullerian Anomaly: Robert's Uterus with adenomyosis in Non communicating Rudimentary right horn

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Introduction: Mullerian anomalies is one of the congenital anomalies of reproductive tract in a women, which can cause menstrual complaints or affect fertility. While some of the anomalies are known to occur quite frequently and can be classified according to the ESHRE or ASRM classification, this case was a diagnostic dilemma as the correct classification of the anomaly was difficult at first glance.

Case: A 16 year old girl, student, unmarried presented to our out patient department with chief complaints of severe dysmenorrhea and vomiting since menarche i.e. for 4 years. She had multiple hospital visits for treatment of dysmenorrhea often managed by injectable analgesics. She had no other complaints. No urinary or bowel complaints. No complaints of fever. Her menstrual cycles were regular, with cycle length of 28-30 days, menses lasted for 4-5 days, with average flow. Associated with severe dysmenorrhea, only mild symptomatic relief from over the counter NSAIDs. On examination her vitals were stable. Per abdomen examination was unremarkable. No history of any other chronic medical illness or surgery. A Trans abdominal scan revealed an Isoechoic lesion similar to myometrial texture measuring 32 x 22 x 27 mm adherent to the right side of uterus with minimal fluid collection in central part. Impression was of Non communicating rudimentary right horn. MRI pelvis was also done which was suggestive of a thick walled cavitatory lesion inseparable from right lateral uterine wall with blood signal intensity showing no obvious communication with endometrial cavity with the differential diagnosis of being and ACUM or unicornuate uterus. She was planned for operative laparoscopy and proceed with diagnostic hysteroscopy. Anesthesia clearance was taken. Intraoperative hysteroscopy revealed a single cavity with single ostia located on left side. Right ostia was not visualized. On laparoscopy uterus was of normal size with small external fundal indentation was noted. Some superficial endometriotic deposits were noted over the peritoneum. Bilateral tubes and ovaries appeared normal. Concurrent hystero-laparoscopy was done which showed patent cavity on left side with normally attached left tube. While the left horn got transilluminated well, no transillumination was seen on right side. The right tube was attached normally to the rudimentary horn.The right horn was incised, which revealed minimal amount of chocolate coloured substance and complete adenomyotic tissue. No well defined endometrial cavity was seen. No communication was seen with the left uterine cavity nor the opening of right tube was seen within this horn. Wide local excision of the adenomyotictissuewas done.Uterine closure was done with barbed sutures. The endometriotic deposits were fulgurated with bipolar cautery. Patient was stable in postoperative period and discharged on day 3. The histopathology report was consistent with adenomyomatous tissue. She is under follow up from last 2 menses and is symptom free as of now.

Discussion:

Various classification systems are present to classify Mullerian anomalies, primarily the ESHRE and ASRM classification systems, but this case was difficult to classify.

Robert's uterus is a rare type of Mullerian anomaly and a variant of septate uterus.

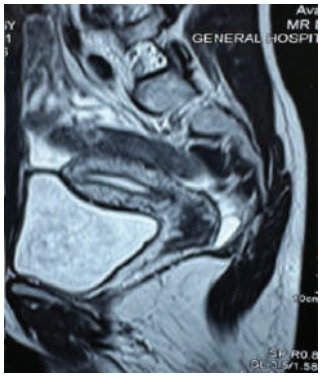
It is also known as asymmetric septate uterus and was first reported by Robert in 1970.

This condition is characterised by non-communicating hemiuterus due to obstruction by the septum.A uterine septum dividing the endometrial cavity asymmetrically, a blind uterine horn usually with unilateral hematometra, a contralateral unicornuate uterine cavity and a normally shaped external uterine fundus. MRI is the preferred method of imaging as it is capable of showing the endometrial cavity and uterine contour in exquisite detail, and it has shown excellent agreement with clinical Mullerian anomaly subtype diagnosis. Coronal T2W images of MRI are ideal for demonstrating the uterine septum dividing the endometrial cavity asymmetrically along with the blind ending cavity and hematometra.

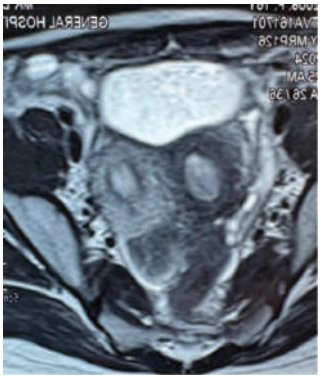
T1W images show the hematometra and hematosalpinx as bright fluid in the endometrial cavity and dilated fallopian tube.

Robert's uterus is managed typically via laparotomy/ laparoscopy with total horn resection or endometrectomy of the blind cavity

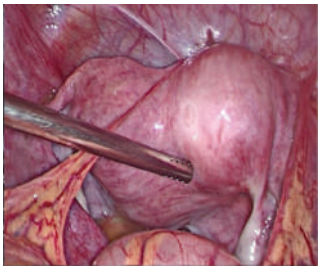
Ref: ASRM Classification 2021 of mullerian anomaly



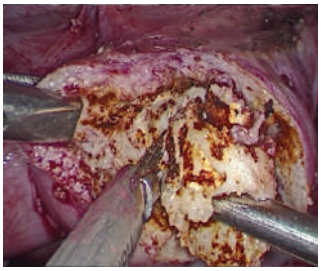
MRI saggital view
Normal Uterus



MRI coronal view Uterus
with 2 cavities



Uterine fundus with fundal
indentation



Adenomyomectomy done

Borderline Ovarian Tumour in a Postmenopausal Woman

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Abstract

Surface epithelial tumors are most common, which comprise 58% of all ovarian tumors. Serous and mucinous cystadenoma are the most common epithelial tumors which accounts for about 35% of ovarian tumor. We report a case of an ovarian tumor with a rare combination Brenner tumor with serous cyst adenoma of ovary in an 84 year old female.

Mrs O, an 84 year old,P2L2, postmenopausal women came with complaints of postmenopausal bleeding.Abdominal examination revealed anabdominopelvic cystic mass 10 weeks size .On vaginal examination, posterior fornix fullness was noted due to the presence of the mass.Laboratory tests were unremark able.Tumour markers revealed raised CA 125 84.4U/ml,Cervical PAP smear showed no evidence of dyskaryotic or malignant cells.Transvaginal ultrasound examination revealed Large multiloculated cyst with solid and cystic areas 9 x 15x 14 cm.On further evaluation with CT revealed Right ovarian multiloculated cyst with solid and cystic areas measuring 9.8 x 16 x 14 cm, with no significantly enlarged lymph nodes, ascites and pleural effusion.The calculated RMI (risk of malignancy index) was 756.ADNEX model predicted 40 % chance of malignancy.She underwent Total laparoscopic inbag hysterectomy with bilateral salpingoophorectomy , infracolic omentectomy and peritoneal sampling . Histopathologicalexamination revealed Right sided mixed surface epithelial ovarian tumour-Serous cystadenoma with borderline brenner tumour with microscopic lesions in the left ovary.Uterus was normal with disordered proliferative endometrium.No atypical cells were found in peritoneal fluid cytology.

Discussion:

Transitional cell tumours of the ovary described for the first time by Brenner in 1907 account for 2 % of all ovarian neoplasms. BOT are mostly diagnosed at the age of 28–62 years around 10 years earlier than invasive ovarian cancer.CA-125 had been widely used in the preoperative assessment of ovarian tumors as a marker that aids diagnosis and gives an indicator of prognosis.

Pathology:

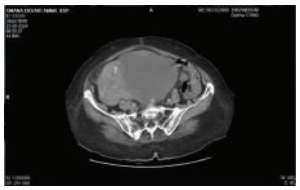
About 20% Brenner tumors occur together with a mucinous or serous cystadenoma or a benign cystic teratoma. Brenner tumor is usually sited in the ovarian cortexand may also occur as a mural nodule in a mucinous or serous cystadenoma and mature cystic teratoma. Pathologic criteria for diagnosis include the absence of stromal invasion in the ovary and at least two of the following characteristics: epithelial tufting, multilayering of the epithelium, mitotic activity, and nuclear atypia.

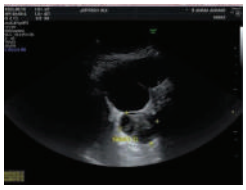
Diagnosis:

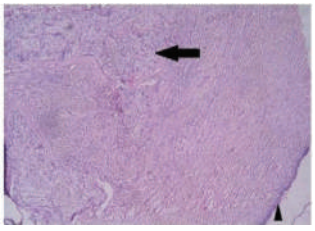
CT does not have any key distinguishing features that would enable differentiating borderline from malignant ovarian tumors; however, it should always be done to identify the possible foci of metastasis. Ovarian masses that show complex features on MRI that are concerning for malignancy but appear as benign on PET are said to be characteristic of borderline ovarian tumors . The diagnosis of borderline ovarian tumor is established intra-operatively by frozen section analysis of the ovarian mass or postoperatively.

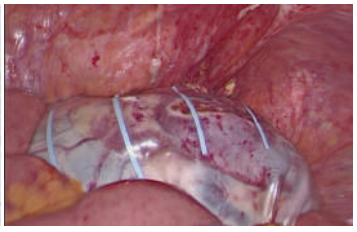
Management

Surgery is considered the main line of treatment. Treatment guidelines recommend tailoring the surgical decision according to the histologic and clinical features of the tumor and the age









of the patient. Fertility-sparing surgery is a valid option for young females with BOTs, while total hysterectomy and bilateral salpingoophorectomy are reserved for menopausal females. The NCCN guideline recommends tailoring the decision of lymphadenectomy on a case-by-case basis as there is no improved survival after lymphadenectomy and omentectomy for BOTs. Generally surgical approach might be performed by laparoscopy as well as by laparotomy. The retrospective multicentre ROBOT study revealed that recurrence rate and overall survival were not affected by the surgical approach . Cyst rupture (33.9% vs 12.4%) and incomplete staging was signifcantly more frequent in the laparoscopic route.

Restaging Surgery

Restaging surgery is recommended if (1) there are histologic features suggestive of invasive recurrence (an invasive peritoneal implant or micropapillary pattern) , (2) the peritoneum is not clearly reported as normalor if there was no systematic exploration during initial surgery, (3) if macroscopic peritoneal implants are found in the initial surgery, (4) if gross lesions remain after initial surgery, and (5) if the patients are less likely to come for regular follow-up.

FollowUp and Prognosis

The recommendation is follow-up every 3 months during first 2 years, every 6 months between 2 and 5 years and yearly thereafter. Clinical examination should be supplemented with TVS and CA 125 levels.

Conclusion:

Borderline ovarian tumors are usually diagnosed at an early stage and have more indolent behavior, excellent prognosis, longer survival, and later recurrence compared with invasive ovarian cancer.. Removal of the preserved ovary, though not mandatory, should be done after completion of child bearing in order to save the patient from the psychological stress of waiting for relapse since there is always a risk of development of invasive ovarian tumor.

Rescue Cervical Cerclage : Prevention of a Previable Birth

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Fellow in reproductive medicine

Case Report:

A 33 year old female G5A4 with previous 4 missed miscarriages , IVF conception presented with chief complaints of heaviness in lower abdominal region at 19 weeks of gestation. There was no history of watery discharge /bleeding per vaginum. There was no history suggestive of urinary tract infection. Her general condition was fair and vitals were stable. Fundal height corresponded to the period of gestation. On per speculum examination cervix was 1 finger loose, dilated with membranes bulging through the entire length of cervical canal into the. The patient was admitted, investigations [complete hemogram, urine routine and microscopic, C-reactive protein (CRP), cervical culture] were sent and tocolytics were started with antibiotics . Ultrasound showed a single live fetus corresponding to 19 weeks with fundal placenta and an effective fetal weight of 400 grams with funelling of cervical os with cervical length of 2.3 cm. The patient was explained all the risks like preterm premature rupture of membranes, chorioamnioitis , preterm labour and benefits of the emergency cerclage and written consent was taken for the procedure.

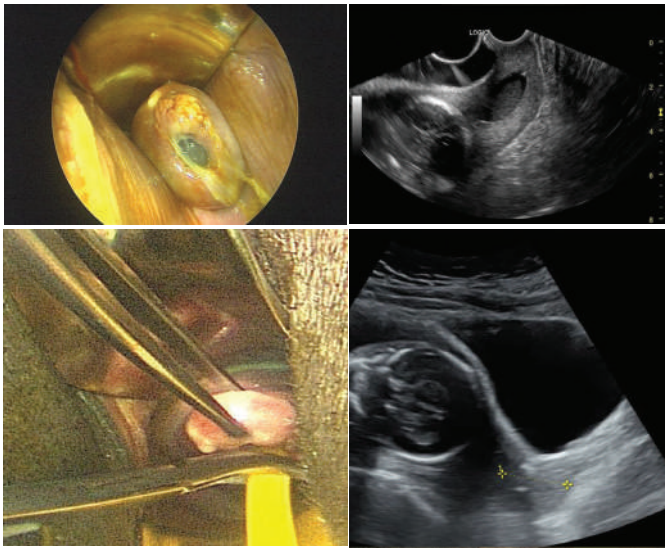
Procedure:

Emergency cerclage was planned under anesthesia. A 16 F foleys bulb introduced into cervical canal and inflated with saline under TAS guidance, to reposit the bulging membranes. Head down position given to patient, bladder drained. Cervical encerclage perfomed using no.1 mersiliene tape and knot tied posteriorly by modified Shirodkar's technique. In the postoperative period, the patient was administered antibiotics and tocolysis . The patient was followed with weekly CRP and total leucocyte counts. Report for cervical culture was negative. The patient is now at 32 weeks of gestation on once weekly intramuscular 17-alpha hydroxyprogesterone caproate injection .Routine maternofetal surveillance is being followed.

Discussion:

Women presenting with painless cervical dilatation in second trimester are left with two options of management: one is expectant and the other is rescue cervical cerclage. Although there are limited randomized controlled trials and meta-analysis on expectant bed rest vs rescue cerclage to date, a few observational studies have shown that pregnancy is prolonged by 6 to 9 weeks with rescue cerclage compared to less than 4 weeks with expectant management. Namouz et al. conducted a literature review in 2013 including 34 studies. Their data suggested that rescue cerclage was associated with a longer latency period and better pregnancy outcomes when compared with bed rest . Emergency encerclage can extend pregnancy by 13.8 to 49.1 days and the neonatal survival rate fluctuates between 46 and 90%. In 2015, a prospective study by Ciancimino et al. also confirmed the positive results of emergency cervical cerclage with 12 patients receiving ECC at 17–26 weeks of gestation, resulting in an average prolongation of pregnancy by 89.9 days and a neonatal survival rate of 83.3%

Emergency encerclage has been associated with a potential risk of membrane rupture and infection, leading to the shortening of pregnancy. The reported rates of membrane rupture have varied from 5 to 25% . At different stages of pregnancy, membrane rupture may lead to miscarriage or affect fetal survival to varying degrees. In some small-scale studies, progesterone, non-steroidal anti-inflammatory drugs (NSAIDs), and prophylactic antibiotics have been used as adjuvant therapies for ECC to varying extents. However, there is little evidence to recommend them as standalone treatments for this condition. Urinary tract infections and bacterial vaginosis can cause cervical dilation,



thereby increasing the risk of preterm birth. Therefore, if a urinary tract infection or bacterial vaginosis is suspected or diagnosed, antibiotic treatment may be used.

Conclusion:

Rescue cervical cerclage is a safe and easy surgical procedure that can prolong pregnancy to viability even with advanced cervical changes. This procedure should be undertaken in an antenatal woman with advanced cervical changes after analyzing the overall clinical picture and comprehensive counseling.

STATISTICS

March to June 2024

TOTAL CASES	349
Laparoscopy	93
Hysteroscopy	79
Minor cases	66
Male cases	17
Obstetric cases	94
Others	0

LAPAROSCOPY CASES	...
TLH	27
Myomectomy	19
Adenomyomectomy	4
Cystectomy	16
Salpingectomy	4
Salpingostomy	1
para ovarian cystectomy	1
Adnexectomy	5
PCO puncturing	4
Recanalisation	2
Abdominal circlage	2
Isthmocele repair	1
sterilisation	1
Excision of endometriotic nodule	1
Cyst aspiration	1
oophoropexy	1

HYSTEROSCOPY	...
Pre IVF	14
Diagnostic	21
Operative	44
SMF resection	1
Endometrial biopsy	23
Septal resection	6
Hysteroscopic polypectomy	12
removal of RPOC	1

MINOR CASES	...
Suction evacuation	13
Manual removal of placenta	1
SSG	10
Cervical encirclage	7
Pipelle sampling	14
EUA	1
Mirena insertion	7
Amniocentesis	3
Fetal reduction	1
Excision of scar endometriosis	1
Vaginal Botox instillation	1
Endometrial PRP instillation	1

MALE CASES	...
TESA	15
NAB	1
PESA	1

OBSTETRIC CASES	...
FTND	34
LSCS	49
Elective LSCS	31
Emergency LSCS	19
Vaccum delivery	13

TOTAL CONCEPTION	...
Spontaneous conception	44
COH + Natural conception	1
IUI conception	12
IUI conception rate	12.50%

ART : IVF/ICSI STATISTICS	
Total no of ART	160
Total conception	42/100
Total conception rate	42%
Total conception in FET cycles	36/78
Conception rate after FET cycles	46.15%
Total conception in fresh cycle	7/22
Conception rate after fresh cycles	31.80%

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