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KJK HOSPITAL

EDITORIAL

WHAT ARE THE FUTURE CHALLENGES AND FUTURE DIRECTIONS IN LAPAROSCOPIC SURGERY?

Welcome to all Faculty and Delegates who have come for the 24th Annual workshop of KJK Hospital and Kerala chapter of IAGE from near and far places.

COST AND ACCESSIBILITY

One of the main challenges facing the widespread adoption of advanced laparoscopic techniques is the cost associated with acquiring and maintaining specialized equipment, such as robotic systems and 3D visualization technology. Efforts to develop more affordable and accessible solutions will be critical in ensuring that these advancements benefit a broader patient population.

STANDARDIZATION AND RESEARCH

As the field of laparoscopic surgery continues to evolve, there is a need for standardization and further research to evaluate the safety, efficacy, and cost-effectiveness of emerging techniques and technologies. This will require collaboration between researchers, clinicians, industry, and regulatory agencies to ensure that innovations in laparoscopic surgery translate to improved patient care.

INTEGRATION OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

The integration of artificial intelligence and machine learning into laparoscopic surgery holds great promise for enhancing surgical decision-making, reducing complications, and improving patient outcomes. Future research should focus on developing AI-powered tools that can assist surgeons in real-time during procedures, as well as predictive analytics that can help identify patients at higher risk for complications.

SUMMARY

In conclusion, recent advancements in laparoscopic surgery have the potential to transform the field and improve patient care. Innovations in robotic assistance, single-incision laparoscopic surgery, natural orifice transluminal endoscopic surgery, 3D visualization, and telementoring have expanded the scope and applications of minimally invasive surgery. As technology and surgical techniques continue to advance, it is crucial to address the challenges associated with cost, accessibility, standardization, and research to ensure that these advancements lead to better outcomes for patients worldwide.

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CALCIFIED RPOC - A RARE AND CHALLENGING PRESENTATION

Dr. AADYA DIXIT
MBBS, DNB, FELLOW IN REPRODUCTIVE MEDICINE

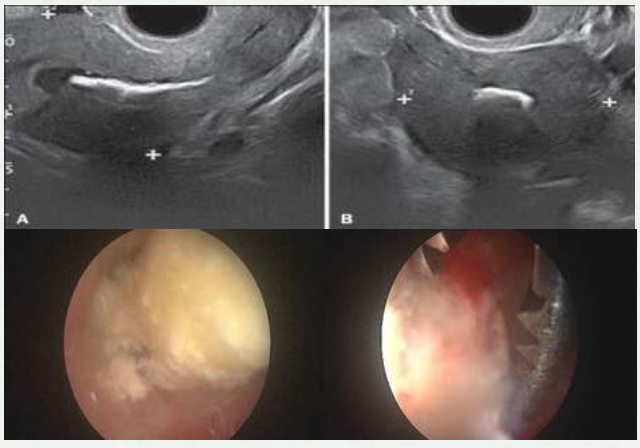
INTRODUCTION

Endometrial calcifications have been reported sporadically in relation to RPOC or as osseous metaplasia of endometrium. Retained products of conception (RPOC) is defined by retention of trophoblastic tissue inside the uterine cavity and it is a complication that involves about 1% of full-term pregnancies-vaginal or cesarean section, and it is more common after miscarriage in the first or second trimester, with a reported prevalence of up to 6%.

CASE STUDY

A 27-year-old patient, P1L1, referred in our OP with chief complaints of irregular vaginal bleeding since her cesarean section. She underwent FT-LSCS 6 months back in view of pathological CTG in another Tertiary care hospital from where she was referred. TVS was performed which revealed **presence of a strongly echogenic endometrial plate with irregular margins measuring 2.8 x 1.6 cm with posterior acoustic shadowing consistent with calcifications. Possible differential diagnosis of calcified RPOC, osseous metaplasia of endometrium, presence of an IUD, foreign bodies, Asherman's syndrome, calcified submucosal fibroid and Müllerian tumor was made.** Proceeded with operative hysteroscopy- 3 x 2 cm of calcified product noted arising from right lateral uterine cavity which was subsequently removed using hysteroscopic grasper. HPR revealed retained placental bits with degeneration and secondary calcification.

A) USG Findings -strongly echogenic endometrial plate with irregular margins measuring 2.8 x 1.6 cm with posterior acoustic shadowing.
B) Intra- operative findings - calcified product arising from right lateral uterine cavity, removed using hysteroscopic grasper.



DISCUSSION

A frequently cited theory to explain endometrial ossification is persistent fetal tissues that keep developing due to persistent inflammation post abortion or full-term delivery. Another hypothesis is that heteroplasia or induction of osteogenesis may occur in multipotential stromal cells forming osseous tissue.
The diagnosis and management of calcified RPOC are challenging because there are no defined diagnostic criteria or treatment protocols.The diagnosis is usually made in the presence of ultrasound findings strongly echogenic endometrial plate. In India, endometrial TB and chronic endometritis should always be kept in mind as it can cause irregular menstrual bleeding as well as calcifications and ossification.

Several reasons favoring operative hysteroscopy in the management of RPOC are reported in the literature -

1. Residual trophoblastic tissue is usually located in a small area of the uterine cavity - hysteroscopic direct visualization allows selective tissue removal, preserving surrounding healthy endometrium from injury.
2. Permits the complete removal of RPOC without the need of a second procedure.
3. Limits the use of energy, minimizes thermal damage, subsequent adhesions formation and reduces the risk of uterine perforation.
4. Another potential complication of vigorous curettage is abnormal embryonic implantation in future gestations, predisposing to abnormal placental development favoring placenta accreta with its potentially devastating obstetrical consequences.

CONCLUSION

Calcified RPOC is a rare clinical finding. Ultrasonography forms an important tool with high degree of sensitivity in the diagnosis of preventing the misdiagnosis and mismanagement of such cases. Operative hysteroscopy should be considered the treatment of choice in women with RPOC, as it is described as a safe and feasible procedure, with low rates of postoperative IUAs formation, and possible advantages in terms of future conception rates.

PECTOPEXY: A LAPAROSCOPIC APPROACH FOR MANAGEMENT OF RECURRENCE OF PELVIC ORGAN PROLAPSE

Dr. MAYANK JAIN
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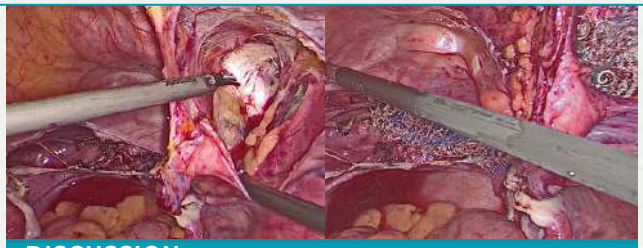
INTRODUCTION

Laparoscopic pectopexy is a new type of endoscopic prolapse surgery. It uses the iliopectineal ligament for mesh fixation of the descended structures, so fewer potential long-term problems are expected. The pelvic outlet does not narrow with this procedure, as is expected with sacrocolpopexy and is not associated with a high intraoperative risk. Mean operation time and blood loss are also reduced during pectopexy.

CASE STUDY

A 45 years lady presented to our outpatient department with complaints of mass coming out per vaginum since 8 years and irregular menstrual cycles. The mass was progressively increasing. She had history of sacro-cervicopexy 9 years back for 3 rd degree UV prolapse, was asymptomatic 1 year post surgery and then again started having same complaints. She had complaints of irregular cycles, with cycle length ranging between 1-3 months, associated with heavy flow. She was P1L1 with previous vaginal delivery. Last child birth was 18 years back. No urinary or bowel complaints were present. On examination procidentia was noted with complete uterus lying outside the introitus with 3 rd degree cystocele and rectocele. Trans vaginal ultrasound was suggestive of Adenomyotic uterus with normal adnexa. PAPS for cervical screening and endometrial biopsy was taken and reports were normal. She was planned for laparoscopic approach for management of proplase. Pre operative investigations were normal. She underwent Laparosopic sub-total hysterectomy + Bilateral salpingectomy + mesh pectopexy + anterior and posterior colpo- perineorraphy under GA. Intraoperatively uterus appeared adenomyotic. Bilateral tubes and ovaries appeared normal. Evidence of previous mesh repair was seen. Bladder dissection was done and bladder was pushed down. Subtotal hysterectomy was done and uterus was cut the level of isthmus. Bilateral salpingectomy was done. The cervix was sutured with vicryl 2-0. Then the peritoneum was dissected at the level of pubic bone between medial umbilical ligament and round ligament and the pectineal ligament was identified as shiny ligament. A 6 x 6 inch polypropylene mesh was used for pectopexy. The mesh was sutured with ethibond 3-0 sutures to the cervix and the anterior and posterior vaginal walls. Intraperitoneally the mesh was mobilized till the pectineal ligament. Metal tackers were used to suspend the mesh. Then anterior and posterior colpoperineo-rraphy was done vaginally. Post surgery the cervix was noted to be 2 cm above the hymen. Patient was stable postoperatively and was discharged on Postoperative day 4.



DISCUSSION

The cumulative lifetime risk of POP surgery at the age of 80 years has been reported to be 12.6% but incidence is likely to be much more. In pelvic reconstruction surgery, apical support is an important factor for a successful outcome. Apical suspension can be performed transabdominally or transvaginally using native tissue or a synthetic mesh. The pectineal ligament (Cooper's ligament) is found to consist of stronger and more durable tissue than the sacrospinous ligament and arcus tendineus of the fascia pelvis. Banerjee and Noé first introduced laparoscopic pectopexy using synthetic mesh anchoring on the bilateral pectineal ligaments in 2011.

Laparoscopic pectopexy offers several practical advantages:

1. It enables the surgeon to use a wide area in the pelvis, that reacts more satisfactorily in complex surgical conditions;
2. It does not reduce the pelvic space, so postoperative defecation and urinary disorders are not expected;
3. The iliopectineal ligament is very strong, thus it is expected that there will be a very low rate of postoperative recurrence of apical prolapse; and
4. The iliopectineal ligament is far from the ureter, intestines, sigmoid, and presacral veins. Because the entire pectopexy operation takes place in the anterior pelvis, dissection in the deep pelvis is avoided in patients with extensive adhesions. The location of the operation exclusively in the anterior pelvis allows for a less steep Trendelenburg position, which may be beneficial for patients with respiratory or circulatory compromise. Hence pectopexy can be considered a good laparoscopic approach for management of prolapse.

CONCLUSION

Laparoscopic pectopexy is a feasible surgical method for apical prolapse, with a shorter operation time and less postoperative discomfort than sacro-colpopexy. Pectopexy may overcome the steep learning curve of sacrocolpopexy because the surgical field of Pectopexy is limited to the anterior pelvis and avoids encountering the critical organs.

UMBILICAL SCAR ENDOMETRIOSIS: A CASE REPORT

Dr. DRASHTI SHAH PANKAJ
MBBS, MS (OBG), FELLOW IN REPREDUCTIVE MEDICINE

Umbilical scar endometriosis is rare and challenging in both diagnosis and treatment , often presenting with cyclical pain and swelling in the umbilical area . this case report discusses a 40 year old female , who presented with bleeding and pain from umbilical scar site linked to her menstrual cycle.

INTRODUCTION

Endometriosis is characterized by the presence of endometrial tissue outside the uterus. Umbilical scar endometriosis is a rare entity and its incidence is approximately about 0.5–1%. It is found that cutaneous endometriosis is more common at surgical sites, i.e., following cesarean sections, hysterectomy, laparoscopy surgery, and any other abdominal surgeries . There are many differential diagnosis for umbilical nodule, i.e., benign condition (granuloma, abscess, sebaceous cyst, lipoma, hemangioma, umbilical hernia, umbilical endometriosis, keloid, desmoids tumor, and infection) and malignant condition (Sister Mary Joseph nodule, melanoma, adenocarcinoma, sarcoma, and lymphoma).

CASE STUDY

In this case report, we present the unusual clinical history of a 40-year-old female, P1L1 , who presented to our hospital . The patient's primary complaint was the presence of painful umbilical swelling and bleeding from umbilicus during her menses from 6 months . She reported regular menstrual periods. She gave history of laparoscopy done for PCO puncturing back in 2010 .She was a known case of endometriosis since 10 years and had documented ovarian endometrioma on TVS during her infertility treatments . On physical examination, we found a 1cm solid black umbilical swelling that was painful and irreducible on palpation, discharging a bloody fluid . On abdominal ultrasound a hypoechoic area measuring 17 x 15 x 11 mm was noted in anterior abdominal wall near the umbilicus . Due to the cyclical nature of umbilical pain and bleeding, which correlated with the patient's menstrual cycle, umbilical endometriosis was suspected.A decision was made to proceed with surgical excision.During the surgical procedure, the indurated area was excised upto the level of peritoneum. The fascia was sutured to the peritoneum, ensuring proper attachment. To complete the procedure, interrupted absorbable sutures were used to close the skin.The patient had a favorable postoperative course and was discharged on the second day following surgery. The diagnosis of umbilical endometriosis was confirmed through histological examination.

CONCLUSION

Umbilical scar endometriosis is a rare entity that requires special attention in the differential diagnosis of umbilical lesions . The initial diagnosis of umbilical endometriosis relies primarily on clinical criteria, but confirmation is achieved through histopathological analysis. Microscopic examination revealing the presence of endometrial stroma and glands serves as the cornerstone for definitive diagnosis . Surgical management is mainly based on an extensive resection that includes the peritoneum, with the possibility of umbilical reconstruction, taking great care to pass through a healthy zone to minimize the risk of recurrence . The risk of recurrence of umbilical endometriosis after surgical resection varies from 5.4% to 27%.However, encouraging results have been observed with extended resection including the peritoneum and umbilical reconstruction, considerably reducing the risk of disease recurrence.

A RARE CASE OF LOW GRADE ENDOMETRIAL STROMAL SARCOMA

Dr. KARUNYA
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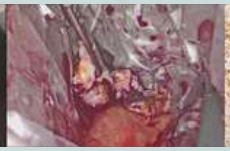
CASE STUDY

37 year old P1L1 female presented to our OPD with chief complaints of heavy menstrual bleeding and dysmenorrhea for past 9 years. She was diagnosed to have Bilateral ovarian endometriotic cyst in the past and underwent laparoscopic bilateral ovarian cystectomy in 2016 at a private hospital. Patient was on Dienogest for 2 years post surgery and was asymptomatic. In 2018, she again developed symptoms of heavy bleeding and hence LNG IUD was inserted in 2018. Patient doesn't have symptom relief with medical therapy and hence requested for hysterectomy. Ultrasound done suggested Adenomyosis with Right ovarian endometriotic cyst with bowel adhesions with MIRENA insitu. MRI Pelvis done which showed Uterine adenomyosis with IUD insitu. Left utero ovarian adhesion with small hemorrhagic follicle in right ovary. Doubtful mild serosal adhesion of right ovary to uterus and sigmoid. No evidence of ovarian cysts at present. She underwent TLH+ Right salphingo oophorectomy+ Left salpingectomy+ Adhesiolysis after getting informed consent. Intraoperatively cervical polyp 2cm noted and polypectomy done and sent for HPE. HPE reports showed uterus showing non secretory endometrium and chronic cervicitis. Polyp- Cellular endometrial stromal in nature- IHC evaluation indicated to assess the proliferative index and confirmation as such picture can be seen in Low grade endometrial stromal neoplasm. Patient was referred to RCC, Trivandrum for Gynae Oncology opinion. Surgical pathology slide review done at RCC showed Low Grade Endometrial stromal sarcoma with myometrial invasion and LVSI- LGESS Stage 1A. Neoplastic cells are positive for CD10 and negative for h- caldesmon. Gynae oncologist has given opinion to do open/ lap Left ovariotomy and refer back. So she underwent laparoscopic left oophorectomy(In Bag) and HPE showed normal ovarian tissue. She was referred back to RCC, Trivandrum and currently on follow up.

TLH SPECIMEN



IN BAG LEFT OOPHERECTOMY

CD10 POSITIVE ON IHC

DISCUSSION

Endometrial stromal sarcoma (ESS) is a rare malignancy and accounts for 0.2% of all uterine malignancies and 10% of all uterine sarcomas. Histological classification of uterine sarcomas includescarcinosarcomas (malignant mesodermal mixed tumors), leiomyosarcomas, endometrial stromal sarcomas and undifferentiated sarcomas.As per 2014 WHO classification, endometrial stromal sarcoma can be classified into four types:

Endometrial stromal nodule (ESN), Low-grade endometrial stromal sarcoma (LGESS), High-grade endometrial stromal sarcoma (HGESS), and Undifferentiated uterine sarcoma (UUS).Soft tissue sarcomas occur at any anatomical site and have a varied range of behaviours, hugely dependent on the histologic subtype and grade of tumour.Aetiology of these tumours is poorly understood, although there may be some association with raised or unopposed oestrogen levels, treatment with tamoxifen, obesity and diabetes.

The most common clinical presentation of ESS is Abnormal uterine bleeding (45 %) followed by palpable mass (20 %), and rapid growth of leiomyoma (10 %). 1/4th of the patient can be asymptomatic. The differential diagnoses are leiomyoma, uterine leiomyosarcoma or other sarcomas or retroperitoneal masses.

Ultrasound lacks specificity and can suggest an incorrect diagnosis of more prevalent conditions such as adenomyosis or leiomyoma. MRI may be helpful in women with ESS; however, it does not provide a definitive diagnosis. Uterine curettage is an important method of preoperative diagnosis of ESS because despite the bulk of the tumor always being intramyometrial, most of these sarcomas involve the endometrium as well. However, the sensitivity of uterine curettage is compromised in cases where the lesion is completely within the myometrium. The definitive diagnosis thus depends upon the histological examination done postoperatively.

Hysterectomy with bilateral salpingo-oophorectomy is optimum initial therapy. Complete resection of disease without fragmentation and with negative surgical margins should be the end target of the surgery. In cases of young women, ovary-sparing surgery can be considered depending on tumor hormonal receptor status, and myomectomy should be considered only for young patients with a strong desire for fertility, with fully informed consent and a planned hysterectomy after the completion of pregnancy.Radiotherapy is chosen when the tumour is inadequately excised or the pelvic disease is locally recurrent. Hormone therapy with progestins, tamoxifen, gonadotropin-releasing hormone (GnRH) analogues, and aromatase inhibitors are suggested for LGESS stages 3–4 and for recurrent disease. LGESS can metastasize many years after initial diagnosis.

Low-grade sarcoma patients may be followed up every 4-6 months for the first 3-5 years to rule out local recurrences and then yearly. High-grade tumors maybe followed-up every 3-4 months for the first 2-3 years, twice a year for the next 2-3 years, and then yearly.

MCDA TWINS WITH CONCORDANT CEREBRAL VENTRICULOMEGALY AND THE COUNSELLING OF PROSPECTIVE PARENTS

Dr. ASIMA KHAN
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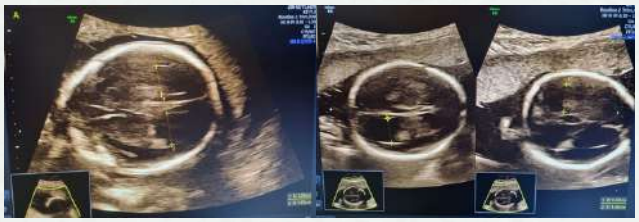
INTRODUCTION

Prevalence of major malformation is three to four times more frequent in MC twins.
Neurological morbidity is four to five times higher in MC than in DC pregnancies. Anomalies may affect all organ systems, but commonest ones involve cardiovascular and central nervous systems. The concordance rate of major congenital malformations is around 20% for monozygotic twins, with most dizygotic twin pairs being discordant. Fetal cerebral ventriculomegaly, is one of the most common fetal neurological disorders identified prenatally by neuroimaging.

CASE STUDY

A healthy 30-year-old women G2E1 with previous history of one ectopic pregnancy. Her present pregnancy was FET Conception with MCDA twins. Her Combined First trimester screening was low risk for both fetuses. She had normal scan at 8, 14, 16 weeks gestation. At 16 weeks gestation ultrasound showed alive MCDA twins with adequate liquor in both fetuses with no evidence of TTS. Evolving progressive cerebral ventriculomegaly (posterior horn of the lateral ventricle) was detected at 18 +5 gestation in both the fetuses. Fetus A showed prominent ventricles on both sides measuring 10mm, 10.5mm and Fetus B had 10.6 mm and 9.6 mm ventricles. Follow up scan at 20 weeks gestation with a detailed anomaly scan along with complete neurosonogram was taken, which showed progressive ventriculomegaly. Fetus A had Ventricles measuring left horn 13mm and right horn 14 mm. CSP was not clearly visualized in Fetus A . Fetus B showed right horn 11.4 mm and left horn 13.5 mm and third ventricle was dilated in both fetuses. With a normal rest of the neurosonogram and no other structural abnormality and no evidence of TTTS, couple were counselled extensively by fetal medicine specialist, Geneticist and obstetrician regarding the concerns and possible etiology which could be multifactorial. The need for further invasive testing including genetic Chromosomal micro array, Whole Exome Sequencing, and TORC PCR was discussed with the couple. She underwent amniocentesis and CMA report was negative for major trisomies 13, 18,21 and sex chromosomes. No significant copy number variations were detected. Maternal TORC was negative for CMV, Toxoplasma and Rubella. However, couple did not undergo WES because of financial constraints and single gene disorders could not be ruled out. In view of quick progression of ventricular dilatation couple were recounselled regarding the need for further follow up scans to see if size of ventricles remains stable or progresses and to look for any further evolving anomalies. The possible risk of post natal neurodevelopmental disorders of 20% in both the twins especially if progressive ventriculomegaly is present in the postnatal period was explained. They decided to go for termination at 23 weeks +3 days gestation. Post expulsion both fetuses showed no gross abnormalities. Postmortem examination was declined.



DISCUSSION

Ventriculomegaly defined as distal lateral ventricle measurement of 10 mm or more. mild -10 to 12 mm, moderate -13 to 15 mm, and severe > 15 mm. Outcome of fetal ventriculomegaly is influenced by various factors including chromosomal abnormalities, viral infection and progression in utero. Fetal ventriculomegaly may increase the risk of neurodevelopmental abnormalities after birth like autism, schizophrenia, epilepsy. Not only developmental brain anomalies produce ventricular dilatation but also acquired conditions like infections, intraventricular hemorrhages and stroke should be considered in differential diagnosis. Throughout pregnancy, ventriculomegaly might remain stable, progress, or regress. Ventriculomegaly can be an isolated finding or associated with other central nervous system and non-CNS anomalies, including genetic conditions that may not be evident at the initial evaluation or even after delivery. Following confirmation of diagnosis, complete examination of fetal anatomy, including detailed neurosonographic assessment should be performed. Fetal brain MRI can act as effective complementary tool to confirm diagnosis and reveal additional CNS anomalies like carpus callosum agenesis which is associated with poor outcomes. International maternal and fetal medicine societies increasingly recognize neurosonography as a more accurate and advanced tool than a screening ultrasound done for fetal CNS imaging.

CONCLUSION

The heterogeneity in etiology, associated neurological or systemic abnormalities, and genetic or infectious causes, and uncertainty due to the risk of progression and continued development and maturation of the brain parenchyma makes prognostication challenging. Multidisciplinary evaluation are essential for assessing possible outcomes of fetuses with ventriculomegaly. Fetal neurology consultation should be planned in collaboration with maternal-fetal medicine specialists and genetic counsellor to discuss prognosis and management based on neuroimaging.

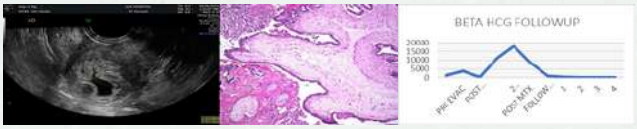
A CASE OF GESTATIONAL TROPHOBLASTIC DISEASE WITH NON-REGRESSINGB HCG VALUES MANAGED WITH METHOTREXATE MONOTHERAPY - A NEOPLASIA OF PREGNANCY

Dr. MONISHA K

MBBS, MS (OBG), JUNIOR CONSULTANT, OBSTETRICS & GYNAECOLOGY

CASE STUDY

Mrs. A, 29-years, P1L0A2, presented to the OPD as a case of recurrent pregnancy loss and anxious to conceive for 3 years. She had two previous missed miscarriages with early third trimester IUFD. She is a known diabetic on OHA and Hypothyroid. Her APLA profile was negative and Anti TPO antibody raised to 222U/ml. Further fertility evaluation revealed normal uterus, ovaries and tubes with normal semen parameters. She had adequate glycemic control and thyroid function tests were within normal limits. Follicular monitoring was done and the couple conceived spontaneously. Her initial β hCG values were 1331 and 3098 uIU/ml respectively. Serial early pregnancy ultrasonogram revealed missed miscarriage with a focal cystic area suspicious of partial mole. Suction evacuation was done and products of conception were tested for microarray analysis and histopathological examination. Histopathology reported products of conception with partial molar changes and moderate trophoblastic proliferation with no evidence of invasion or malignant changes. Microarray analysis was normal. She was on weekly β hCG follow up , and her values were decreasing followed by a sudden plateau after 2 months to 11140 uIU/ml and 18451 uIU/ml respectively. The diagnosis of post molar gestational trophoblastic neoplasia was made. There was no evidence of retained products of conception on ultrasonogram. Baseline blood parameters were normal. Her FIGO prognostic score was & lt;6(Low risk) and she was started on Methotrexate 50 mg/m 2 - Folinic acid regimen for 8 days. Her repeat was β hCG 8391 uIU/ml. Further B HCG follow up was done till three negative values were obtained and monthly for 6 months. Her post follow up blood parameters were normal.



DISCUSSION

The incidence of hydatidiform mole varies between 0.57 to 2 per 1000 pregnancies. Gestational trophoblastic disease (GTD) is a group of uncommon conditions associated with pregnancy. A plateaued or rising HCG level enables the early detection of progression of CHM and PHM to GTN that occurs in 15 –20% and 0.5%–5% of cases, respectively.

FIGO criteria for diagnosis of post molar gestational trophoblastic neoplasia

- When the plateau of hCG lasts for four measurements over a period of 3 weeks or longer; that is, days 1, 7, 14, 21.
- When there is a rise in hCG for three consecutive weekly measurements over at least a period of 2 weeks or more; days 1, 7, 14.
- If there is a histologic diagnosis of choriocarcinoma

In the 2000 FIGO staging and classification , a risk score of 6 and below is classified as low risk and above 6 is considered high risk.

LOW RISK GESTATIONAL TROPHOBLASTIC NEOPLASIA

Patients with low- risk GTN should be treated with one of the single agent methotrexate or actinomycin D protocols. Hysterectomy is not routinely recommended as post operative chemotherapy is still required in most cases. The complete remission rate is close to 100 %.

Box # First-line single agent chemotherapy regiments for low-risk gestational trophoblastic neoplasia

- MTX-FA 8-day regimen (50mg MTX intramuscularly on days 1, 3, 5, 7 with folinic acid 15mg orally 24 h after MTX on days 2, 4, 5, 8): repeat every 2 weeks.
- MTX 0.4mg/kg (max. 25mg) intravenously or intramuscularly for 5 days every 2 weeks.
- Actinomycin D pulse 1.25mg/m2 intravenously every 2 weeks.
- Actinomycin D 0.5mg intravenously for 5 days every 2 weeks.
- Others: MTX 3--50 mg/m2 intramuscularly weekly, MTX 300mg/m2 infusion every 2 weeks.

Abbreviation: MTX-FA, methotrexate-folinic acid

HIGH RISK AND ULTRA HIGH RISK GESTATIONAL TROPHOBLASTIC NEOPLASIA

Multiple agent chemotherapy regimens are used for management. The commonly used is EMA- CO (etoposide, methotrexate, actinomycin D, cyclophosphamide, vincristine). About 20% of patients do not attain complete response with EMA- CO therapy but can be salvaged with further therapy. A subgroup with score of 13 or greater, as well as patients with liver, brain, or extensive metastases, do poorly when treated with first- line multiple agent chemotherapy including various combinations of methotrexate, etoposide, vincristine, bleomycin and platinum agents and pembrolizumab.

STATISTICS JULY - SEPTEMBER 2024

TOTAL CASES	248
Laparoscopy	64
Hysteroscopy	56
Minor cases	57
Male cases	6
Obstetric cases	62
Others	3
LAPAROSCOPY CASES	**64**
TLH	13
Myomectomy	22
Adenomyomectomy	2
Cystectomy	13
Salpingectomy	3
Salpingostomy	2
Para ovarian cystectomy	
Adnexectomy	1
PCO puncturing	1
Recanalisation	
Abdominal circlage	1
Isthmocele repair	1
Sterilisation	3
Excision of endometriotic nodule	
Cyst aspiration	
Oophoropexy	
LAVH with PFR	1

OTHERS	
VH with PFR	1
Intrauterine PRP instillation	2
HYSTEROSCOPY	**56**
Pre IVF	7
Diagnostic	12
Operative	37
SMF resection	4
Endometrial biopsy	16
Septal resection	3
Hysteroscopic polypectomy	9
Adhesiolysis	1
Tubal cannulation	3
Endometrial ablation	1
MINOR CASES	**57**
Suction evacuation	16
Manual removal of placenta	
SSG	8
Cervical encirclage	9
Pipelle sampling	10
EUA	
Mirena insertion	6
Amniocentesis	2
Fetal reduction	2
Excision of scar endometriosis	

Vaginal Botox instillation	
Endometrial PRP instillation	
Bartholin cyst marsupilisation	1
MALE CASES	**6**
TESA	2
NAB	3
TESE	2
OBSTETRIC CASES	**79**
FTND	39
LSCS	40
Elective LSCS	20
Emergency LSCS	20
Vaccum delivery	16
TOTAL CONCEPTION	**79**
Spontaneous conception	27
COH + Natural conception	3
IUI conception	12
IUI conception rate	12.50%
ART : IVF/ICSI STATISTICS	
Total no of cases	105
Total conception	48
Total conception rate	46%
Total conception in FET cycles	36
Conception rate after FET cycles	65.45
Total conception in fresh cycle	5
Conception rate after fresh cycles	42%

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