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Editorial

DISTRESSING SURGE IN CHILD ABUSE CASES RAISES ALARMS IN KERALA

Dear All,

Warm greeting from KJK Hospital. Hoping that all of you have had a wonderful and joyous Onam. Today, in my editorial, I would like to talk about Kerala, our own state, renowned for its picturesque landscapes and high literacy rates.

Our state is grappling with a deeply unsettling crisis - an alarming increase in child abuse cases. This surge in child abuse, encompassing various forms of physical, sexual, emotional, and neglect, threatens the safety and well-being of the state's youngest and most vulnerable members. As we confront this unsettling reality, it is crucial to understand the causes, consequences, and most importantly, the collective actions needed to address this distressing issue.

Understanding the Crisis: The rise in child abuse cases is not a simple statistical anomaly; it reflects an underlying crisis with complex roots.

Several factors contribute to this harrowing surge: 1) **Economic Stress**: Economic hardships, exacerbated by the COVID-19 pandemic, have placed significant strains on families. Job losses, financial instability, and poverty have heightened stress levels, potentially leading to increased incidents of child abuse. 2) **Technological Advances**: While technology offers numerous benefits, it has also exposed children to new threats such as online predators, cyberbullying, and the sharing of explicit content. 3) **Societal Stigma**: Kerala, like many places, struggles with the stigma associated with reporting child abuse. Families often hesitate to seek help due to fear of social repercussions, exacerbating the problem. 4) **Lack of Awareness**: Many individuals are unaware of the signs of child abuse or the resources available for support. This lack of awareness can delay intervention and perpetuate the cycle of abuse.

Consequences of Child Abuse: Child abuse has far-reaching consequences, affecting not only the immediate victims but also society as a whole. The physical, psychological, and emotional scars left on abused children can persist into adulthood, affecting their mental health, relationships, and overall well-being. Moreover, the societal costs of child abuse, including healthcare expenses, law enforcement involvement, and lost productivity are substantial.

Taking Action: Addressing the distressing increase in child abuse in Kerala requires a coordinated and comprehensive approach: 1) **Awareness and Education**: Launch a widespread awareness campaign to educate parents, caregivers, educators, and children themselves about child rights, the signs of abuse, and the importance of reporting it. 2) **Support Services**: Strengthen support services for families facing economic stress, substance abuse, or mental health challenges. Ensure that counseling and assistance programs are readily available. 3) **Technology Education**: Develop programs that teach children and parents about online safety, the risks of online activities, and responsible digital citizenship. 4) **Reporting Mechanisms**: Establish anonymous and easily accessible reporting mechanisms for child abuse concerns. Encourage individuals to report any suspicious activity promptly. 5) **Child-Friendly Policies**: Advocate for policies that prioritize child

welfare in all aspects of life, including education, healthcare, and social services. 6) **Community Engagement**: Engage local communities in creating safe environments for children, fostering a culture where child protection is a shared responsibility. 7) **Legal Reforms**: Review and strengthen child protection laws, ensuring that abusers face severe consequences for their actions.

Conclusion: The surge in child abuse cases in Kerala is a distressing wake-up call that demands immediate attention and action from all sectors of society. It is our collective responsibility to protect our children and provide them with a safe and nurturing environment in which they can thrive. By raising awareness, advocating for change, and offering support to families in need, Kerala can work towards eradicating this distressing increase in child abuse, securing a brighter future for its youngest citizens.

With kindest regards



Dr K Jayakrishnan
Managing Director &
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ABSENT NASAL BONE AND ITS ASSOCIATION WITH ANEUPLOIDIES



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Mrs P, 35 year old, Primi at 16 weeks 1 day, with spontaneous conception came with history of unossified nasal bone in NT scan. Repeat scan showed NT -2 mm and absent nasal bone. Patient and relatives were explained about the chromosomal abnormalities and were counselled about the need for amniocentesis. Genetic Amniocentesis was carried out under LA using 22 G spinal needle. 20 ml of amniotic fluid was aspirated and send for QFPCR. Microarray-report showed 46 chromosome complement, No clinically significant aneuploidies or Copy number variations were detected, negative by QF-PCR. Anomaly scan showed SLIUG OF 20 weeks, cervix-short cervix 1.3cm with U shaped funnelling, absent nasal bone, echogenic intracardiac foci in left ventricle. She underwent prophylactic cervical cerclage. Growth scan at 31 weeks showed early onset IUGR with mildly decreased end diastolic flow in umbilical artery. She underwent elective LSCS after steroid cover at 37 weeks. She delivered a male baby 2.14 kg, with imperforate anus. Baby was shifted to higher centre in view of imperforate anus for further evaluation.



DISCUSSION

The most common clinically significant aneuploidy among live born infants is Down's syndrome. Other sonographically detectable aneuploidies include trisomy 13, 18, monosomy X and triploidy. Second trimester ultrasound can detect 2 types of sonographic markers suggestive of aneuploidy. The most commonly studied markers include thickened nuchal fold, mild fetal pyelectasis, echogenic bowel, echogenic intracardiac focus and choroid plexus cyst. Major markers include ventriculomegaly, microcephaly and hand and feet abnormalities, cleft lip and palate, micrognathia, cystic hygroma, esophageal atresia, omphalocele, renal agenesis, endocardial cushion defect.

Nasal bone hypoplasia is caused by the abnormal development of the centres of ossification. It is recognized as either an isolated defect, or one that exists in association with other malformations. Although nasal bone hypoplasia is a well-known sonographic marker, associated with trisomy 21, it has also recently been associated with other genetic syndromes. Nasal bone hypoplasia is found in 0.1% to 1.2% of euploid pregnancies. Maternal ethnic origin significantly affects the normal range of fetal nasal bone length in the second

trimester. Detection of isolated nasal bone hypoplasia in the second trimester is always a cause for concern, but in practice, is rarely associated with trisomy 21. In the case of negative cell-free fetal DNA screening results and isolated absent or hypoplastic nasal bone, the Society for Maternal-Fetal Medicine recommends no further aneuploidy evaluation.

Nasal bone hypoplasia is one of the phenotypic features of trisomy 21. It is also observed in association with trisomy 18 and 13. The condition may result in facial dysmorphism and may also be seen in other, rarer genetic syndromes. Individual cases have been associated with Wolf-Hirschhorn syndrome or Cri-du-chat syndrome. In recent years, chromosomal microarray analysis (CMA) has been recommended as first-line genetic testing in prenatal diagnosis. CMA offers higher test resolution than traditional G-band karyotyping, and provides additional information in 6-7% of pregnancies with abnormal ultrasound findings. Whole exome sequencing (WES) yields a diagnosis of the underlying genetic cause in 25-35% of children with an unexplained presumed genetic disorder. WES improved the identification of genetic disorders in fetuses with structural abnormalities and showed an underlying genetic cause in 10% of fetuses that were negative in karyotype testing and CMA. Although new techniques allow for more detailed prenatal genetic diagnosis, the awareness of women, regarding prenatal testing, is still low.

Imperforate anus is a relatively common anomaly, with an incidence of 1:1500 to 1:5000 in newborns. Imperforate anus is often part of the association of vertebral anomalies (V), anal atresia (A), tracheo-esophageal fistula with esophageal atresia (TE) and renal dysplasia (R) (VATER) or VATER plus cardiac (C) and limb (L) anomalies (VACTERL) association but other associations, syndromes and sequences have also been frequently reported to include anorectal anomalies. There is also a well known association with trisomy 21. Usually imperforate anus is not diagnosed until after birth. Antenatal diagnosis/suspicion of imperforate anus has been reported sometimes as early as 12 weeks' gestation. Nevertheless, prenatal diagnosis of imperforate anus seems to be difficult and is often lacking. Urgent reconstructive anorectal surgery is not needed. However, immediate evaluation is important and urgent decompressive surgery may be necessary.

CONCLUSION

Absent foetal nasal bone is one of the strongest soft markers in the second trimester ultrasound screening. Detailed prenatal diagnosis is advisable to rule out abnormal karyotype when absent nasal bone is associated with other ultrasound markers of foetal aneuploidy or structural abnormality. Nasal bone hypoplasia is a marker of facial dysmorphism in many genetic syndromes, and in all cases, the indications for invasive diagnosis with microarray should be considered. Furthermore, in cases with nasal bone hypoplasia, skeletal anomalies and normal CMA, it is advised to also consider molecular testing to make the diagnosis. Prenatal diagnosis of imperforate anus is not always possible.

The prenatal detection rate of imperforate anus was only 15.9. Nevertheless, consciousness of the condition and the ability to recognize the most typical ultrasound findings in imperforate anus may improve the detection rate.

Scar site endometriosis: A cyclical menace post cesarean section



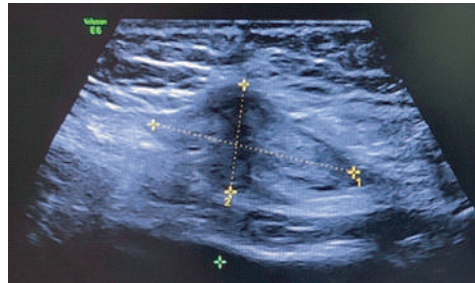
Dr Mayank Jain MD, OBG
(Fellow)

INTRODUCTION

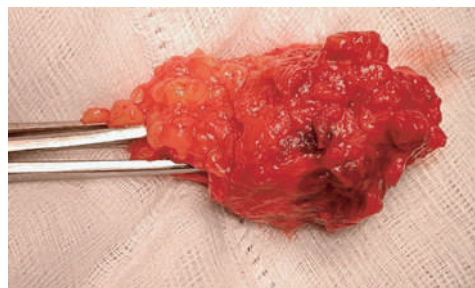
Endometriosis is hormone dependent gynecological condition characterized by presence of endometrial tissue outside the uterine cavity. The presence of ectopic endometrial tissue embedded in the subcutaneous adipose layer and the muscles of the abdominal wall is called abdominal wall endometriosis. AWE can occur spontaneously, but usually develops in association with a previous surgical procedure, such as a cesarean section (CS), hysterectomy etc. Cesarean scar endometriosis (CSE) is the most commonly reported type of AWE. This may be due to the direct implantation of endometrial tissue at the incision site anywhere in the parietal wall. It is a condition of rare occurrence with reported incidence ranging between 0.03-0.45%. CSE may cause long-term discomfort involving cyclical lower abdominal pain especially at the previous scar site or localised swelling at the previous scar site.

CASE PRESENTATION

A 32 year, P3L3, lady presented to our out patient department with complaints of excruciating pain in lower abdomen over the scar site that starts few days before menses and increases during menstruation. Mild relief in symptoms after over the counter pain killer intake. History revealed previous 3 of her deliveries were through a lower segment caesarean section. Her complaints had started 1 year after her last caesarean section. No other significant history was present. General physical examination was unremarkable. On local examination pfannenstiel scar was present, area of induration could be palpated over the scar more towards the right side. Patient had and ultrasound report suggestive of heterogenous lesion measuring 3.3 x 1.8 x 2.5 cm in right side of midline of lower anterior abdominal wall near LSCS scar sitesuggestive of scar endometriosis. Patient was informed regarding the suspected diagnosis and 3 months of oral contraceptive pills were started. However patient complained similar complaints after stopping the oral contraceptive pills. Repeat ultrasound after 6 months was suggestive of heterogenous area measuring 3.6 x 1.9 cm, with slightly irregular margins, seen in the subcutaneous fat plane involving the muscle layer of anterior abdominal wall. The depth of the mass was about 1.2 cm from skin surface, in the LSCS scar region near midline. Impression was of scar site endometriosis. The case was discussed with the patient and further options for management were discussed with the patient. Decision for scar site endometriosis excision was taken. Consent for the procedure was taken, explaining the risk of recurrence. Before shifting the patient to operation theatre, mapping of endometriotic deposit was done with ultrasound and site was marked. Endometriosis excision was done under GA. Subcutaneous layer below the skin was dissected. The endometriotic mass of about 3 x 3 cm was extending below the rectus sheath. The sheath was incised and the mass was excised completely and sent for histopathology. Rectus sheath was closed with prolene No 1 sutures. Skin was approximated with subcuticular sutures. Patient was stable post operatively and discharged on next day of surgery. Tab dinogest 2mg was started for 3 months.



Ultrasound image showing heterogenous area suspected of scar endometriosis



Scar endometriosis excision specimen

DISCUSSION

Scar endometriosis is an extremely rare condition. In a study examining a cohort of 151 patients diagnosed with CSE, Zhang and Liu reported an incidence of 1.96% and usually occurs after caesarean section (1). The interval between the inciting surgery and its occurrence can vary between few months to many years. The differential diagnoses of such swellings include haematomas, stitch granulomas, neuromas, abscess and malignancy. Different diagnostic modalities that can help in diagnosis include ultrasonography, CT and MRI; these modalities generally guide as to depth and extent of lesion and help in planning excision. The pathogenesis of endometriosis is complex and CSE is believed to be the result of a mechanical iatrogenic implantation, through the direct inoculation of the abdominal fascia and/or subcutaneous tissue. The large amount of endometrial cells liberated into the pelvis during uterine surgeries can potentially be trapped in the wound; and the nurturing role of blood and hormones, after inoculation of the cells, allows them to grow and develop into subcutaneous masses.(2) Excision of the endometriotic masses from the abdominal wall is one of the treatment modalities for relieving the symptoms with good results.

It is interesting to note that Ideyi et al. have published spontaneous occurrence of abdominal wall endometriosis, in absence of previous surgery, highlighting the complex multifactorial pathophysiological processes behind the development of endometriosis(3). However since most cases reported are post caesarean sections, it is recommended to follow good surgical technique during caesarean section. Irrigation of the incision site before abdominal wall closure, using separate sponges for cleaning the uterine cavity and skin wound are some of the methods that one can try to use that may decrease the chances of scar endometriosis. (4)

Strategies and Outcome of Total Laparoscopic Hysterectomy for Large Cervical Fibroid



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INTRODUCTION

Fibroids are smooth muscle tumors, that develop within the myometrium, but occasionally can be seen arising from cervix and broad ligament. Cervical fibroids account for 1 - 2% of all uterine fibroids and large cervical fibroids are rarer. Total laparoscopic hysterectomy for large cervical fibroids is difficult as their presence in the pelvic cavity leads to poor pelvic visibility, decreased uterine mobility, deformity and dislocation of the uterine cervix, and displacement of the bladder and ureter from their anatomical positions. Since cervix has abundant blood vessels, including the uterine artery and vein, TLH for large cervical fibroids often results in substantial blood loss. Laparoscopic myomectomy during laparoscopic hysterectomy for large uterine fibroids has been reported to be an effective technique. Enucleation is generally performed as laparoscopic surgery for uterine fibroids.

CASE REPORT

44 years, P2L2, Previous 2 LSCS, came as a referred case with chief complaints of feeling of incomplete evacuation of urine, abdominal discomfort since 3 months and continuous spotting for 20 days post menses since 1 year. Diagnosed with multiple fibroids uterus, took Inj Lupride 3.75 mg one dose and then came for total laparoscopic hysterectomy.

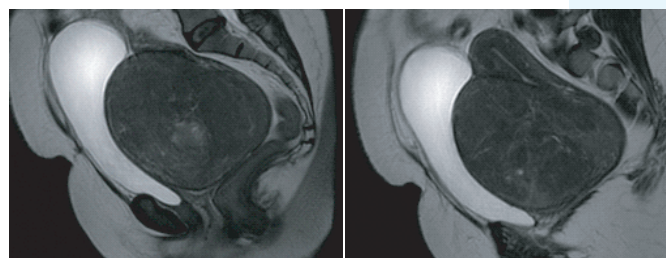
On physical examination, patient was average built, BMI was 24.7 kg/m². her vitals were stable and no pallor. Her general, cardiovascular and central nervous system examination was within normal limits. On per abdominal examination, a large firm mass was palpable corresponding to 16-18 weeks gravid uterus with its lower pole not palpable. The mobility of the mass was absent owing to its huge size, the margins of the mass was well defined and it was non-tender. On per speculum examination, cervix could not be seen and vagina was healthy. On per vaginum examination, cervix pulled up. Uterus 16-18 weeks, could not be felt separately from the mass, pouch of Douglas was free. Her blood investigations were within normal limits, LDH-334 u/ml, CA-125 11.3 U/ml. Patient had an ultrasound abdomen, MRI abdomen and pelvis done in June 2023, cervical smear cytology was negative.

TAS - Uterus 15 x 12 x 10 cm. Anterior wall lower segment IMF with submucosal extension 9.8 x 9 x 10 cm, IMF 4 x 4 cm, Posterior wall SSF 7.5 x 7 cm. ET 13 mm. Bilateral ovaries normal. Significant post void residue 149 ml.

MRI - Uterus bulky, measuring 14 x 4 x 5.2 cm, enlarged and lobular due to fibroids. Endometrium displaced posteriorly by fibroids. Cervix distorted. Endo-cervical canal normal. The utero-vesical and rectouterine fat planes normal.

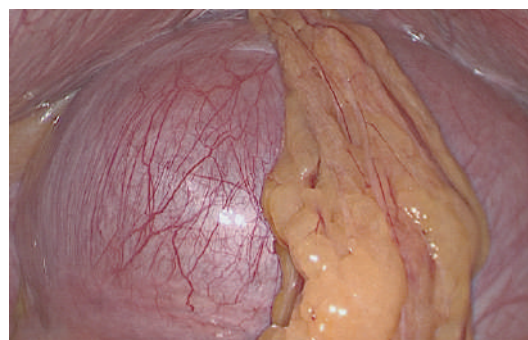
Large 12 x 9.8 x 10.6 heterogeneous subserosal component at anterior wall noted in middle and lower segment of uterus. The lesion shows few haemorrhagic component. The fibroid is displacing the endometrium cavity posteriorly. On contrast the lesion is enhancing heterogeneously with few central non enhancing areas.

Another 10 x 8 x 14 mm IMF at anterior wall upper segment of uterus.



Findings confirmed.

The surgery proposed was Total laparoscopic hysterectomy. Total laparoscopic hysterectomy with bilateral salpingectomy after enucleation of myoma performed.



Operative notes - Uterus enlarged to 16-18 weeks with a large cervical fibroid occupying the complete vesicouterine pouch. Diluted vasopressin was injected in serosa of the uterus over fibroid to devascularize it, transverse incision placed over the uterine serosa overlying the fibroid using Harmonic Ace Scalpel, bladder pushed down, myoma spiral was introduced and myoma was lifted out with gentle traction and counter traction and myomectomy was done. Bilateral tubes and ovaries were normal. Bilateral round ligament, tubes & ovarian ligament cauterized and cut using the Ligasure. After that broad ligament leaflet was opened and same was extending anteriorly up to the bladder fold and again bladder was pushed down ward. Bilateral uterine vessels cauterized and cut with Ligasure and following which the vault was opened with Monopolar L-hook. Vault closed with no.1 Quills barbed suture. Haemostasis achieved using bipolar cautery. Bilateral Salpingectomy done. Uterus with cervix, bilateral tubes and myoma in pieces delivered vaginally. There was no injury to adjoining vital organs like bladder, ureter or bowel loops. Check cystoscopy was done bilateral VUR noted. Post-operative period was uneventful, discharged on post op 4th day with Oral hemetincs

DISCUSSION

Fibroids are common benign tumors of the uterus and are composed of muscles and fibrous connective tissue. Most of the fibroids are limited to the body of the uterus, but only 1-2% arise from the cervix. Most cervical fibroids are supravaginal in location, but can be vaginal as well. The large size of cervical fibroid leads to distortion of anatomy of ureter, bladder and uterine vessels and thus increasing risk of injury to these structures. So, correct knowledge of the altered anatomy and proper technique is a key to success in such cases. Use of laparoscopy in these cases is technically difficult requiring good team effort and exceptional surgeon's skills. TLH was successfully completed by performing debulking surgery and without the need for blood transfusion. The reason for performing debulking surgery during such TLH was to improve the pelvic cavity visibility and uterine mobility. Performing of debulking surgery allows the bladder and ureters to revert to their anatomical positions, along with the displaced and/or deformed uterine cervix that also return to its anatomical position and shape. In terms of debulking surgery, enucleation of large cervical fibroids was performed. Difficult TLH in patients with large cervical fibroids would be made easier by debulking surgery. Ureteral injury is one of the most serious complications of total hysterectomy.

CONCLUSION

Cervical fibroids are a rarity as far as location of fibroids in other parts of the uterus are concerned. Consequently, surgical management also present as a technical challenge. Distorted anatomy leading to difficulty in identification of uterine vessels and ureter, limited visual field and space due to large size of the mass along with poor uterine mobility, increases the difficulty level while performing laparoscopic hysterectomy in such cases and thus it requires a high level of expertise and laparoscopic skill, it is still feasible for large cervical fibroids and can be performed without the need for blood transfusion by performing debulking surgeries, such as enucleation of the fibroids.

Sentinel Lymph Node Mapping in Endometrial Cancer to Reduce Surgical Morbidity- always, sometimes or never

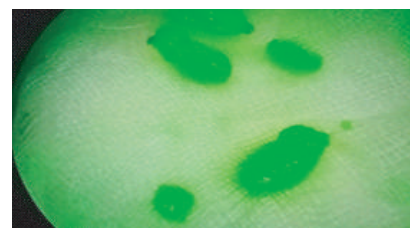


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Reproductive Medicine

Endometrial carcinoma is a malignant epithelial tumour that arises from endometrial columnar epithelium lining of uterus. With the advent of better screening and diagnostic techniques cervical cancer incidence is becoming low but one cancer that is being seen very commonly in women is endometrial cancer.

CASE REPORT

A 44 year old, P2L2, previous 2 LSCS, came to OPD with chief complaints of heavy menstrual bleeding. Patient had history of TURBT (transurethral resection of bladder tumour) in view of invasive papillary urothelial bladder carcinoma. An ultrasound demonstrated thickened endometrium (19.4mm). Endometrial biopsy was taken which showed moderately differentiated FIGO grade 2 endometrioid adenocarcinoma. MRI was done which showed enlarged uterus measuring 10.8 x 5.5 x 6.3 cm with endometrial cavity moderately enlarged or thickened (26 mm) with nearly homogenous hyperintense signal in T2WI. The endomyometrial junction was well defined indicative of Ca Endometrium FIGO Stage 1A. Hence, a decision for total laparoscopic hysterectomy with bilateral salpingo-oophorectomy with sentinel lymph node sampling was taken as it was FIGO Stage 1A Ca endometrium. Patient underwent total laparoscopic hysterectomy with bilateral salpingo-oophorectomy with sentinel lymph node sampling in which 4 ml of Indocyanin green dye was injected at 3- and 9-o clock and sentinel iliac lymph nodes were identified under infrared camera after waiting period of 10 minutes. HPR report was consistent with moderately differentiated endometrioid adenocarcinoma FIGO stage 1A Grade 2. No metastasis seen in biopsied lymph nodes.



(A) Retroperitoneal dissection being done to retrieve SLN.

(B) SLN sampling.

(C) Specimen retrieved vaginally.

DISCUSSION

There are 2 types of endometrial carcinoma- Endometrioid and Non-endometrioid carcinoma. Endometrioid type is more common, estrogen dependent, low grade tumour and exhibit microsatellite instability and mutations in PTEN, PIK3CA, K-RAS and CTNNB1. Risk factors include increased levels of estrogen (caused by obesity, diabetes and high-fat diet), early menarche, nulliparity, late menopause, Lynch syndrome, older age (≥ 55 years) and tamoxifen use. About 90% of patients with endometrial carcinoma have abnormal vaginal bleeding, most commonly in the postmenopausal period. Diagnosis is usually made by endometrial biopsy. Patients with uterine-confined endometrial carcinoma are candidates

for sentinel node mapping which assesses the pelvic nodes bilaterally and may be less morbid than complete lymphadenectomy. Currently, the patients with high-risk: (1) well-differentiated or moderately differentiated, pathological grade G1 or G2; (2) myometrial invasion < 1/2; (3) tumour diameter < 2 cm are commonly recommended for a systematic lymphadenectomy (LAD). However, conventional LAD shows high complication rates. Sentinel lymph node (SLN) refers to the first lymph node that is passed by the lymphatic metastasis of the primary malignant tumour through the regional lymphatic drainage pathway and can indicate the involvement of lymph nodes across the drainage area. If sentinel lymph node biopsy comes as negative then no further treatment is required stage 1A Ca endometrium as this clearly tells that disease is specified to uterus only. Mounting evidence has demonstrated a high detection rate (DR), sensitivity and negative predictive value (NPV) in patients with early-stage lower risk EC using sentinel lymph node mapping (SLNM) with pathologic ultra-staging. Meanwhile, SLNM did not compromise the patient's progression-free survival (PFS) and overall survival (OS) with low operative complications. TH/BSO and lymph node assessment is the primary treatment of uterine-confined endometrial carcinoma which can be performed by any surgical route

(laparoscopic, robotic, vaginal or abdominal) although the standard is to perform the procedure via a minimally invasive approach. Randomized trials and a Cochrane Database Systematic Review support that minimally invasive techniques are preferred due to a lower rate of surgical site infection, transfusion, venous thromboembolism and decreased hospital stay. Pelvic lymph nodes from the external iliac, internal iliac, obturator and common iliac nodes are frequently removed for staging. Para-aortic nodal evaluation from the inframesenteric and infrarenal regions may also be utilized for staging in women with high-risk tumours. Visual evaluation of the peritoneal, diaphragmatic and serosal surfaces with biopsy of any suspicious lesions is important to exclude extrauterine disease.

PRINCIPLES OF EVALUATION AND SURGICAL STAGING WHEN SLN MAPPING IS USED

Cervical injection with dye is a validated technique for identification of lymph nodes that are at high risk for metastases (i.e. SLN in patients with early-stage endometrial cancer). Superficial injection (1–3 mm) of total 4 ml of dye with deep injection (1–2 cm or 3–4 cm) at 3-, 6-, 9-, and 12- o'clock position is being given and dye spreads in superficial subserosal, intermediate stromal and deep submucosal lymphatic sites of origin. The radiolabeled colloid most commonly injected into the cervix is technetium-99m (99mTc), Isosulfan Blue 1% and Methylene Blue 1%. Indocyanine green (ICG) recently emerged as a useful imaging dye that requires near-infrared camera (700-900 nm) for localization and provides a very high SLN detection rate. One of the largest series on ICG SLN mapping reported overall and bilateral SLN detection rate of 96% and 88% respectively.

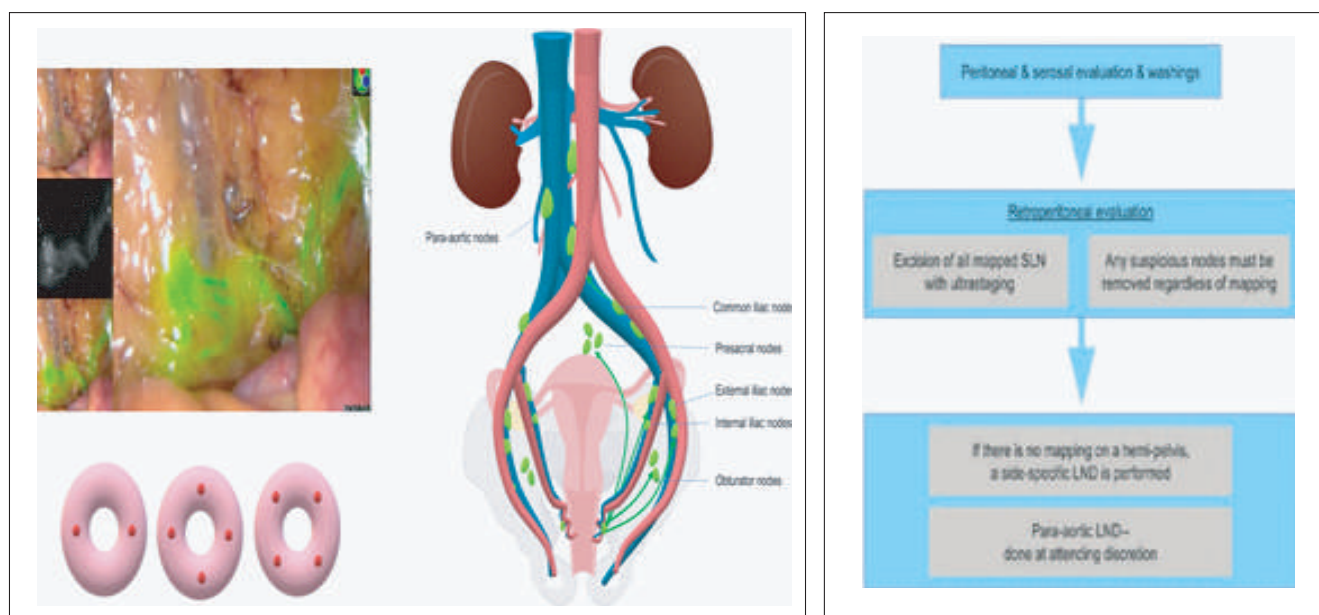


FIGURE (A) SLN and lymphatic vessel mapped in surgery using ICG dye and intraoperative fluorescence imaging system (B) Common lymphatic drainage pathway of endometrial cancer. SLNs are mostly located in external iliac and obturator region and less commonly in presacral and common iliac area. (C) Three patterns of cervical injection sites of SLNM. (D) SLN Algorithm for surgical staging of endometrial cancer

NCCN recommends the application of SLNM in EC patients with lesions apparently confined to the uterine cavity without any extra-uterine metastases on imaging examination. Meanwhile, NCCN also permits the potential use of SLNM in early-stage high-risk EC patients like serous carcinoma, clear cell carcinoma and carcinosarcoma.

CONCLUSION

Several studies indicated that SLNM may be a safe and effective alternative for lymph node assessment in apparently uterine-confined EC with a sufficient diagnostic accuracy and similar survival prognosis even in unfavourable histology types. However, the lack of convinced evidence like RCTs and long-term follow-up data limit its utilization. Better standardization of SLNM protocol, surgical training program and ultra-staging technique are also needed. Further investigations should be focused on the oncologic outcomes of SLNM and the clinical relevance of LVMD on adjuvant therapy.

LAPAROSCOPIC ABDOMINAL CERCLAGE: AN OPTION FOR HABITUAL ABORTION



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Junior Consultant in OBG & GYN

37 years old Mrs. X, married for 12 years came with history of two previous second trimester abortions. In her first pregnancy, she had cervical insufficiency followed by spontaneous rupture of membranes at 21 weeks. Placental histopathology showed acute chorioamnionitis. During her second pregnancy, prophylactic cervical encirclage was done at 13 weeks and she spontaneously expelled the fetus at 17 weeks gestation. In view of failed transvaginal encirclage in last pregnancy, we proceeded with interval laparoscopic abdominal encirclage.

Preterm birth remains a leading cause of neonatal morbidity and mortality. Cervical insufficiency, commonly defined as the inability of a cervix to retain a pregnancy, is an important cause of preterm birth. This complicates 0.05% to 1.00% of pregnancies. The underlying physiology of cervical insufficiency is poorly understood. The innate risk factors include Mullerian anomalies and diseases with abnormal collagen, such as Ehlers-Danlos syndrome. Acquired risk factors include cervical trauma, prolonged second stage of labor, repeated mechanical dilation, and loop electrosurgery excision procedures (LEEPs) or cold knife conization procedures.

The diagnosis of cervical insufficiency is based on a history of one or more second-trimester losses after painless cervical dilation in the absence of labor or abruption. Cerclage is the mainstay of treatment in such cases. Cerclage is typically performed via a vaginal approach. The most commonly used techniques are modifications of methods originally described by McDonald and Shirodkar.

In addition, a cerclage can be placed trans-abdominally. Using an abdominal approach, a cerclage is placed at the cervicoisthmic junction, which may provide greater structural support to the cervix. Also, it avoids the presence of a foreign body in the vagina, which may decrease the risk of preterm rupture of membranes or intra-amniotic infection. This technique was first described as an open procedure by Benson and Dupree

in 1965. The transabdominal cerclage (TAC) placement is typically performed under spinal or regional anesthesia, and a Pfannenstiel incision is used. The uterus is exteriorized, and on both sides, the uterine vessels are identified and retracted laterally to create an avascular space between the uterus and the vessels in the broad ligament at the level of the internal os of the cervix. A non-absorbable thick braided 5-mm suture is guided through this space using a right-angle clamp. The suture may be tied anteriorly or posteriorly, and it is left in place. The hospital admission and recovery time and complications of open TAC are similar to that of other open procedures.



Figure 1 :
Knot tied posteriorly

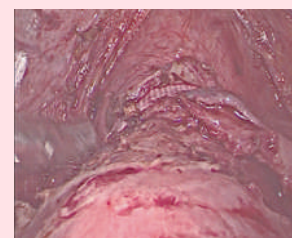


Figure 2 :
Suture seen from above
at the level of internal os

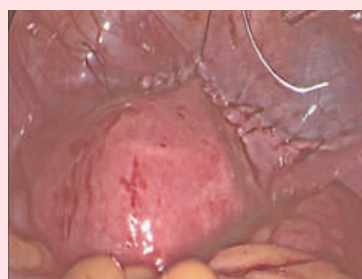


Figure 3 :
Final picture after
approximating UV fold

In the past 10 to 15 years, a minimally invasive surgical approach for TAC placement has been developed and increased in availability and popularity. The use of conventional laparoscopy, robotic surgery, and single-incision laparoscopy for TAC placement has been described.

Many different techniques are reported for laparoscopic TAC placement; most describe a 3-port laparoscopic approach, sometimes with a fourth suprapubic assistant port. This requires a non-absorbable thick braided 5-mm suture, a straightened needle, and a uterine manipulator. The uterovesical and paravesical spaces are dissected and a window made in the broad ligament through which the suture is placed either anteriorly or posteriorly. In addition, there is a recent description of modified laparoscopic TAC placement with the non-absorbable thick braided 5-mm suture tied in the vagina, which enabled vaginal removal at term and

allowed for an attempt at normal spontaneous vaginal delivery. The use of TAC in the prevention of preterm birth was evaluated in a recent randomized controlled trial (RCT), the Multicentre Abdominal vs Vaginal Randomized Intervention of Cerclage (MAVRIC) study.

Laparoscopic TAC placement procedures are associated with less risk of blood loss as there is increased visualization and less risk of uterine vessel injury. This risk can be further reduced if the procedure is done before conception, during the inter pregnancy interval. Because, the uterus is smaller, which makes accessing the cervicoisthmic junction easier. In addition, the surgical risks related to anesthesia and blood loss do not have the potential to affect pregnancy when interval TAC is performed. Laparoscopic approach required a shorter hospital stay and quicker return to activity for the patient.

However, TAC is a more morbid and complicated surgery than transvaginal cerclage, as it involves abdominal access and dissection with potentially increased bleeding risks and is associated with longer operative time. In addition, TAC placement typically necessitates cesarean delivery, exposing the patient to another abdominal surgery.

Other operative complications of TAC include pelvic infection, small bowel injury, bladder injury, laceration of uterine vessels, and insufficient tightening of the cerclage. The other complications are spontaneous uterine rupture during pregnancy, uterine rupture with term labor, and uterine dehiscence noted at the time of cesarean delivery. Complication rates are similar in laparoscopic and open TAC procedures. Long-term morbidity associated with TAC include chronic pelvic pain and morbidity associated with repeat surgeries for TAC placement, cesarean delivery, and potentially TAC removal.

Because TAC is associated with both increased morbidity of placement and the need for cesarean delivery, it is not offered as a first-line treatment to patients with cervical insufficiency. Alternatively, it is typically offered to patients with a history of an unsuccessful vaginal cerclage placement in a previous pregnancy or in whom a transvaginal cerclage would be exceedingly difficult to place for anatomic reasons. The anatomical reasons include patients with an extensively amputated cervix without ample cervix to perform a transvaginal cerclage, such as in patients with recurrent LEEPs or trachelectomy and in patients with a congenital short cervix.

Patients with a TAC in situ should be delivered by cesarean between 37 0/7 and 39 0/7 weeks of gestation and the abdominal suture may be left in place following birth for future pregnancies. There are no data to support routine TAC removal. However, for patients undergoing a tubal ligation at the time of cesarean delivery, suture removal can be considered, provided it is not anticipated to involve significant dissection and blood loss.

Subsequent pregnancies with repeated use of the same TAC have similarly good survival rates and rates of term birth, and long-term complications of a retained TAC are rare. Early pregnancy loss in the setting of TAC placement can be managed with dilatation and evacuation without compromising the TAC. Advanced pregnancy loss can be managed with laparoscopic removal of the TAC and usual obstetrical management. The Laparoscopic approach to TAC is associated with fewer complications and can be considered where suitable surgical expertise is available.



STATISTICS

May to Aug 2023

TOTAL CASES

LAPAROSCOPY	106
HYSTEROSCOPY	77
MINOR CASES	67
MALE CASES	12
OBSTETRIC CASES	78
OTHERS	1

LAPAROSCOPY CASES

TLH	28
TLH with sentinal node biopsy	1
LAPAROSCOPIC MYOMECTOMY	23
LAP ADENOMYOMECTOMY	4
CYSTECTOMY	15
FULGURATION OF ENDOMETRIOTIC DEPOSITS	10
PCO PUNCTURING	3
SALPINGECTOMY	6
SALPINGOSTOMY	3
OVARIAN ECTOPIC RESECTION	1
LAP ABDOMINAL ENCIRCLAGE	4
ABDOMINAL ENCIRCLAGE REMOVAL	2
DIAGNOSTIC LAPAROSCOPY	1
OOPHORECTOMY	1
LAPAROSCOPIC STERILIZATION	2
OVARIAN PRP INSTILLATION	1
GONAECTOMY	1

HYSTEROSCOPY CASES

PRE-IVF HYSTEROSCOPY	12
DIAGNOSTIC HYSTEROSCOPY	30
OPERATIVE HYSTEROSCOPY	35
Polypectomy	6
Endometrial Biopsy	15
Septal resection	4
SMF resection	5
Tubal cannulation	4
Therapeutic curettage	1

MINOR CASES

Suction evacuation	18
Fractional curettage	7
SSG	16
Cx encirclage	9
Bartholin cyst excision	2
Endometriosis excision	1
Pipelle sampling	7
Fetal reduction	2
Examination under anaesthesia	1
ERA	1
Cu T insertion	1
Amniocentesis	1
Vaginal tightening	1

MALE CASES

TESA	9
TESE	2
NAB	1

OBSTETRIC CASES

FTND	27
LSCS	51
Elective Iscs	28
Emergency Iscs	23
Vaccum	6
OTHER CASES	1

VAGINAL HYSTERECTOMY

TOTAL CONCEPTION

Total IUI conception	17
IUI conception rate	12.20 %
spontaneous	47
COH+ Natural	11

ART : IVF/ICSI STATISTICS

Total no of cases	160
Total conception	44
Total conception rates	42.30%
Total conception in FET cycles	35
Conception rate after FET cycles	44.30%
Total conception in fresh cycle	9
Conception rate after fresh cycles	36%

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