



A LARGE OVARIAN ENDOMETRIOMA IN AN ADOLESCENT GIRL- A CASE REPORT

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ABSTRACT Diagnosis of Endometriosis in young adolescent girls is most challenging in gynaecology. Endometriosis is defined as the presence of endometrial glands and stroma outside the uterine cavity. Endometriosis affects 10–15% of all women in reproductive age group and 70% of women with chronic pelvic pain. Endometriosis is most commonly encountered in the hilum of ovaries, uterosacral ligament, posterior leaf of broad ligament and pouch of Douglas. Presenting symptoms may include congestive dysmenorrhea, chronic pelvic pain, dyspareunia, dysuria, dyschezia. However, in significant proportion of cases patient remains asymptomatic. Diagnosis is usually by clinical suspicion, symptoms, signs, physical examination and imaging modalities. Laparoscopy remains gold standard for diagnosis and management of endometriosis which can be further confirmed by histological examination. We report a case of 18 year old unmarried female presented to our rural tertiary care centre with complaints of congestive dysmenorrhea for one year, increased frequency of micturition for 3-4 months, history of fever on and off for 2-3 months associated with chills and rigor. patient had history of loss of appetite for 15 days. She also gave history of significant weight loss and history of vomiting on and off since 2-3 months. A provisional diagnosis of large endometrioma (12*10cm) was made on clinical suspicion and CT-pelvis report and patient was taken up for laparoscopic management. Visualisation of pelvis for evidence and grading of endometriosis was done. A large (12*10cm) cyst filled with altered tarry blood in right ovary removed by cystectomy and reconstruction of ovary performed. A diagnosis of grade 3 endometriosis was made. Histopathology report confirmed endometriotic cyst. Early diagnosis and management can prevent catastrophic complications and long term sequelae like infertility, chronic pelvic pain and malignant changes. It highlights how crucial it is to have a wide differential diagnosis that takes endometriosis into account in any teenage girl experiencing pelvic discomfort, chronic pelvic pain. To overcome current obstacles, enable early detection and treatment, and prevent morbidity linked to advanced illness, More knowledge, education, and research on endometriosis in this youthful population is needed.

KEYWORDS :

INTRODUCTION-

Endometriosis in young adolescent females is showing increasing trends posing challenging in diagnosis and management. It is defined as the presence of endometrial glands and stroma outside the uterine cavity. The most accepted theory of endometriosis is the implantation of endometrial tissue through retrograde menstruation but the etiology is still poorly understood.² Endometriosis affects 10–15% of all women in reproductive age group and 70% of women with chronic pelvic pain. Endometriosis is most commonly encountered in the hilum of ovaries, uterosacral ligament, posterior leaf of broad ligament and pouch of Douglas.³ Presenting symptoms may include congestive dysmenorrhea, chronic pelvic pain, dyspareunia, dysuria, dyschezia. However, in significant proportion of cases patient remains asymptomatic. Almost half of women with endometriosis also report with inability to conceive. Patient often presents with cyclical abdominal pain.

Bowel and bladder symptoms-dysuria, dyschezia can usually coexist.⁴ Diagnosis is usually by clinical suspicion, symptoms, signs, physical examination and imaging modalities. Laparoscopy remains gold standard for diagnosis and management of endometriosis which can be further confirmed by histological examination.⁵

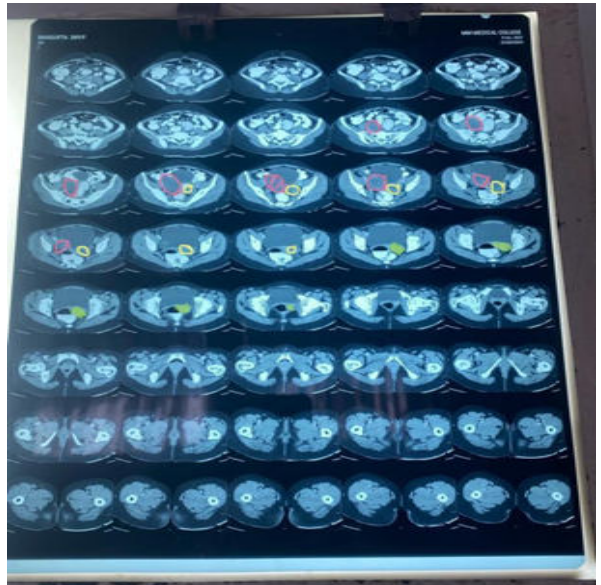
CASE SUMMARY-

An 18 year old adolescent unmarried girl presented to our tertiary care centre with complaints of congestive dysmenorrhea for 1 year and increased frequency of micturition for 3-4 months. she had history of fever on and off for 2-3 months associated with chills and rigor. Patient had history of loss of appetite for 15 days. She also gave history of significant weight loss and history of vomiting on and off since 2-3 months. Patient was on erratic treatment (NSAID) for pain relief. Patient had no significant medical, family and surgical history. On examination, her vitals were stable with mild pallor, no icterus, oedema, lymphadenopathy, cyanosis, clubbing were seen. On local examination, abdomen was soft and non tender. Pelvis examination not done as patient is unmarried. Her laboratory investigation:

Hb	11.4gm%
alpha feto protein	1.02ng/ml
beta hcg	<0.10 mIU/mL
CA 125	121U/ml
LDH	173 U/L

Montoux test	negative
sputum for AFB	negative
ESR	25 mm/hr

On USG whole abdomen and pelvis, anteverted uterus with endometrial thickness of 10 mm, right adnexa showed a well defined multiseptated predominantly cystic lesion measuring 9.9 *6.1 cm with a solid exogenous content along the periphery of lesion on left side measuring approx. 1.1 cm with no significant internal vascularity and calcification-?ovarian epithelial tumor. CT pelvis revealed bilateral adnexa bulky, right adnexa showed a well defined tubo-ovarian cystic lesion showing multiple thin separation. The lesion measuring 10.7 cm*8.6 cm*7.8 cm. No calcification/fat attenuation seen on post contrast images, There was peripheral and septal enhancement. A nodular area was seen peripherally which appeared hyperdense on plain scan with no appreciable enhancement on post contrast images.-?Endometrioma.





Images showing bulky bilateral adnexa with right complex tuboovarian cystic lesion - ?endometrioma. Pink colour shows bulky and septated right adnexal lesion. Yellow colour shows left adnexal lesion. Green colour shows uterus

Based on the CT report a provisional diagnosis of large endometrioma was made and patient was taken up for Laparoscopy after informed consent.

Laparoscopic findings - A 12*10cm multiloculated cyst present in right side of ovary. Cyst wall was adherent to omentum and lateral pelvic wall. Flame shaped hemorrhages seen in areas adjacent to uteri sacral ligament. Pouch of Douglas was obliterated with dense band of adhesions. Burn match stick marks seen over pouch of Douglas. Both fallopian tubes congested and buried under adhesion with ovarian mass. Uterus nulliparous size and congested. Perihepatic adhesion present.

A diagnosis of grade 3 endometriosis was made.

Patient was taken up for laparoscopic ovarian cystectomy and Frozen section sent.



Right Ovarian Cyst Sent For Frozen Section

On frozen section, cyst wall lined by hemosiderin laden macrophages. no endometrial gland or stroma identified. no evidence of atypia or malignancy noted. Post operatively antibiotic coverage was given and Tab Dinogest 2 mg once daily for 6 months was initiated along with high dose of calcium 1 gm daily. The post operative period was uneventful and discharged under stable condition on Post operative day 5. Her histopathology report show right ovary was consistent with endometriotic cyst. On follow up after 6 months of surgery, patient had feeling of well being with no symptoms. USG was normal and patient had gained 2 kg of weight.

DISCUSSION-

Teenage girls commonly present with noncyclical pain in lower abdomen. Hence, diagnosis of endometriosis remains significant challenge due to a number of factors: (i) the knowledge gap between patients and physicians; (ii) the lack of research specifically focused on adolescents; and (iii) a higher threshold for laparoscopic surgery for a definitive diagnosis.

When surveillance is not suitable, surgery has historically been the primary definitive treatment for endometrioma. It is advised that early-

stage endometrioma can be surgically treated to relieve symptoms, improve quality of life, and lessen the disease's potential to negatively impact future fertility⁵. In our patient, symptoms, USG, CT-pelvis pointed towards diagnosis of endometriosis, prompting for laparoscopic staging and management.

While surgical intervention is advised for endometriomas of 6 cm or greater due to the associated risks of infection, rupture, and malignancy. However, endometrioma size reduction with oral Dienogest has shown positive outcomes⁶. In our case, after laparoscopic management, we also prescribed Tab Dinogest with high dose of calcium.

Medical management with NSAIDs, oral contraceptive pills, progesterones (oral, injectable and intrauterine devices), SPRMs (Selective Progesterone Receptor Modulators), Gonadotropin releasing hormone Agonists can be used to improve quality of life.⁷

The overall frequency of ovarian carcinoma arising in already diagnosed cases of endometriosis was 0.3–0.8%, a risk which is 2–3 times higher.⁸

Endometriosis is commonly diagnosed after the second or third decade of life, approximately one third of patient with confirmed endometriosis experience their first symptom before 15 years of age. Symptoms like pelvic pain can interfere with school attendance, involvement in sports and participation in social activities⁹. Severe endometriosis may be predicted by symptoms seen in teenage years.

It highlights how crucial it is to have a wide differential diagnosis that takes endometriosis into account in any teenage girl experiencing pelvic discomfort and swelling. To overcome current obstacles, enable early detection and treatment, and prevent morbidity linked to advanced illness, more knowledge, education, and research on endometriosis in this youthful population is need of the hour.⁶

CONCLUSION:

Large endometriomas are relatively rare in adolescents and should be kept in the differentials while evaluating patients with congestive dysmenorrhea. Timely diagnosis and management can prevent catastrophic complications and long term sequelae include infertility, chronic pelvic pain and malignant changes. Strong clinical suspicion and accurate diagnostic modalities play a key role in successful management of large endometriomas in order to improve the quality of life of women with congestive dysmenorrhea.

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