LARGE ENDOMETRIOMA - A CASE REPORT

Nidhi Bansal¹, Hiremath P.B.², Meenal C.³, S.P Runkumar⁴, Reshma Hiremath⁵

¹Assistant Professor, Dept of Obstetrics & Gynecology, SVMCH & RC, Ariyur, Puducherry, India.
²Associate Professor, Dept of Obstetrics & Gynecology, SVMCH & RC, Ariyur, Puducherry, India.
³Professor and Head, Dept of Obstetrics & Gynecology, SVMCH & RC, Ariyur, Puducherry, India.
⁴Prof & Head, Dept. of Pathology, SVMCH & RC, Ariyur, Puducherry, India.
⁵IMO, Mapusa, Goa, India

ABSTRACT

Endometrioma or endometriotic cyst or chocolate cyst is the name given to endometriosis of the ovary. These cysts contain dark colored blood products due to repeated hemorrhage during the menstrual cycle. Their size usually varies from 2-5cms, but may enlarge up to 20cms. Commonly sites of endometriotic cysts are in the ovary (75%), uterovesical fold / pouch of Douglas (70%), broad ligament (50%) and uterosacral ligaments (35%), and rarely found in the uterus (10%) or colon (5%). The gold standard modality for diagnosis of endometriosis is visualization of typical lesions during laparoscopy or laparotomy and histopathological confirmation. In this case report, we are highlighting a large endometrioma and the preoperative diagnostic dilemma. The intraoperative picture appeared as a large hemorrhagic ovarian cyst. However, the diagnosis of endometrioma was made by demonstrating typical spiral arterioles and endometrium in the cyst wall.

KEYWORDS: Endometriosis, Chocolate cyst, Endometrioma, Infertility, Laparoscopy, Laparotomy.

INTRODUCTION

Endometriosis is one of the most common benign gynecological conditions and is considered as the most common cause for major surgical intervention in young women, after uterine leiomyoma¹. Von Rokitansky in 1860 described endometriosis as a clinicopathological...
condition in which functioning endometrial glands and stroma are present outside the uterine cavity. It remains an enigmatic disease process till today, despite extensive research over the past century. The relation between endometriosis and infertility is still unexplained and there are few studies to propose the surgical and hormonal remedies\textsuperscript{2}.The clinical presentation of endometriosis is varied and may present with few peritoneal deposits to more severe manifestations like pelvic adhesions, chocolate cyst formation and deep infiltrating disease\textsuperscript{1}. American society for reproductive medicine (ASRM) has classified endometriosis in a scoring system to quantify the extent and the location of the disease. This system of classification guides comparison of the response to surgical and medical treatment and helps in outlining the factors predictive of disease outcome\textsuperscript{2}.

RESULTS

A 29 year old patient with primary infertility for 6 years attended our gynecology out patient department with a history of abdominal distension and pain abdomen since two weeks. On abdominal examination, 24 weeks size uniformly enlarged cystic midline mass, non tender, with well defined borders and free mobility was palpated arising from the pelvis. Per vaginal examination revealed a normal cervix, uterine size not exactly made out and fullness in all vaginal fornices. Ultrasonography showed a normal sized uterus with 10mm endometrial thickness. Right ovary showed a large well circumscribed round cystic lesion measuring 17x16x15cms with no internal echoes or septations. No colour uptake of the wall. No evidence of ascites. Liver was normal, suggestive of serous cystadenoma of right ovary (Fig. 1).Routine hematological investigations were normal. Serum CA-125 was 17.5IU.

Patient was taken for laparotomy. Intraoperative findings showed a large cystic lesion arising from the pelvis, measuring 17x16x15cms containing dark chocolate colored material(Fig. 2).The mass was adherent posteriorly to the large bowel and dense adhesions present in the pouch of Douglas. Near total cystectomy was done. Uterus and left adnexa found normal. As the patient was infertile, chromopertubation was done. Left side spill was noted. Patient recovered well in the post operative period.

Histopathology showed cyst wall with haemosiderin laden macrophages with adjacent hemorrhage present in the endometrial stroma. Most of the endometrial tissue is destroyed by repeated hemorrhages (Fig.3). Typical spiral arterioles were also seen suggestive of hemorrhagic cyst – changes are consistent with endometriosis (Fig.4)
Fig. 1: Ultrasound picture of ovarian cyst

Fig. 2: Gross picture of ovarian cyst

Haemosiderin laden macrophages

Fig. 3: High power (40x) view of cyst wall showing haemosiderin laden macrophages
DISCUSSION

Endometriosis is one of the most common benign gynecological conditions and is considered as the most common cause for major surgical intervention in young women, after uterine leiomyoma. It remains an enigmatic disease process till today, despite extensive research over the past century. Ultrasonography (USG) is the initial modality of investigation for endometriosis.

The most common appearance for an endometrioma as per a study by Kupfer et al is that of a cystic adnexal mass with homogeneous low-level internal echoes (82%)\(^3\). However in another study by Fried et al it was found that endometriomas were purely cystic (30%), cystic with few septations (62%) and solid (8%)\(^4\). On analyzing, it seems that their appearance follows the natural course of hematoma resolution. To begin with, the lesions are homogeneous which appear cystic, followed by partial resolution and liquefaction and finally seen purely cystic. Doppler pattern in endometriomas was as described by Kurjak\(^5\) (pericystic vessels at the level of the ovarian hilus) is found in majority of patients, however it was also seen in other cystic ovarian masses. Therefore, Doppler study does not seem to improve the diagnostic value\(^6\).

Presently, the gold standard for diagnosis of endometriosis is inspection of the abdominal cavity and histological demonstration of lesions using laparoscopy or laparotomy\(^7\).

Treatment modality varies between different regions worldwide. In Japan, gonadotropin-releasing hormone (GnRH) analogues are widely used\(^8\). In other countries including India, oral contraceptives and non-steroidal anti-inflammatory drugs are widely used for endometriosis related pain. Danazol is still considered as a treatment option, despite its side
effects. Newer generation progestins are popularly prescribed due to their better tolerability in the medical management of endometriosis.

In recent years, surgery is the accepted modality of treatment for moderate to severe endometriosis associated with infertility, as fertility outcome is better with surgical rather than medical or no treatment. Amongst the surgical options, laparoscopy is preferred, even though, laparotomy gives similar results.

Multiple etiological factors are implicated in ovarian cancer. Some cancers like clear cell and endometrioid carcinomas are reported to have an association with benign disease like endometriosis.

CONCLUSION
Large endometrioma is a rare clinical entity which may create a preoperative diagnostic dilemma. Intraoperative findings and histopathology is essential to delineate the final diagnosis. Laparoscopy or laparotomy provides the same result as far as fertility outcome is concerned in infertile patients with endometriosis. Endometriomas may also be associated with clear cell or endometrioid carcinoma.

REFERENCES