Gigantic Parovarian Cyst: A Rare Case Report

Abstract

Giant parovarian cysts are rarely seen in adolescents. The cysts predominantly arise from mesothelium covering the peritoneum, usually in the broad ligament but sometimes may be seen between ovaries and ipsilateral fallopian tubes. Parovarian cysts constitute 10 to 33% of adnexal masses and are usually seen in the 3rd and 4th decades of life. These cysts may vary from small lesions to larger ones. Small cyst may remain undiagnosed but larger cyst usually presents with conditions due to pressure effect or swelling. Patients presenting with large paraovarian cyst need surgical treatment and the tumour can be removed by laparotomy. If the cyst can be separated from ovary and fallopian tube, attempt should be made to conserve the ovary and fallopian tube by considering ovariopexy.

We report a case of parovarian cyst in a 37 year female presenting with an abdominal swelling gradually increasing in size with a provisional diagnosis of a benign unilocular right ovarian cyst made accordingly and was removed surgically and the histopathology revealed its identity.

Keywords: Parovarian cyst, Ovarian cyst, Abdominal mass, Laparotomy.

Introduction

Giant parovarian cysts are rarely seen in adolescents.\(^1\)\(^2\) The cysts predominantly arise from mesothelium covering the peritoneum, usually in the broad ligament but sometimes may be seen between ovaries and ipsilateral fallopian tubes. The patient usually presents with enlarging lower abdominal mass which may be rarely complicated with pressure effects on other abdominal cavity organs, torsion, perforation, and hemorrhage. Surgery is the mainstay of treatment; however, enucleation of the cyst alone preserving the ovary and fallopian tube by ovariopexy may help in retaining the fertility and development of puberty in young patients.\(^3\)\(^4\)

We present here the case of a 37-year-old female presenting with giant parovarian cyst.

Case Report

A 37-year-old female presented with an abdominal swelling which was gradually increasing in size for 7 months.

The patient had normal bladder and bowel habits. There was no history of weight loss or weakness, and dietary habit was also normal. There was no menstrual abnormality including dysmenorrhea.

On examination, vital signs were normal (pulse rate of 86 per minute and BP record of 120/80 mm Hg. On abdominal examination, an intra-abdominal mass measuring 32 cm vertically, non-tender, soft and cystic in consistency and mobile freely with well-defined margin was observed. There was no evidence of free fluid in the peritoneal cavity. Rectal examinations revealed no abnormality.
Ultrasound examination revealed a normal-sized uterus with normal echo-texture and endometrial echogenicity. Left ovary was normal in size and position. Right ovary was not visible; in place there was a large cystic swelling measuring around 32.61x30.91 cm arising from right adnexa. Some solid elements were visible within the lesion. The cystic swelling was occupying whole of the abdomen. Both the kidneys and ureters were normal.

MRI whole-abdomen of the patient showed a large, well-defined, thin-walled, homogeneously T1 hypointense and T2 hyperintense abdomino-pelvic lesion arising from the pelvis and reaching up to the upper retro-peritoneum. The lesion appeared to arise from the right adnexa reaching midline and was seen displacing the bowel loops. It showed a well-defined plane with the surrounding abdominal structures. No obvious internal septation, fatty tissue, calcification, or enhancing solid components were visible. Right ovary was not seen separately whereas left ovary was visible and was normal in size measuring 26x18 mm. A small follicular cyst was seen with no significant lymphadenopathy and ascites. A provisional diagnosis of a benign unilocular right ovarian cyst was made accordingly.

Serum beta HCG, CA 125, CEA, Beta-hcg, CA 19-9 and AFP estimated by fluoro-immunoassay and found to be within normal limit. Preoperative investigations were normal. After thorough preoperative evaluation and fitness, the patient was posted for surgery. Laparotomy was done with a midline incision extending from suprapubic area till above umbilicus. The cystic mass which was tense with smooth surface was removed (Fig. 1). The mass was originating from right paraovarian adnexa. The right ovary was attached to the cyst. The fallopian tube was found to be thinned out; and spread over the mass and was adherent to the cyst. No free fluid was present in the abdomen. The cyst was excised enmass and right salpingo-oophorectomy was also performed on the ipsilateral side. Contralateral ovary and fallopian tube were healthy. Histopathological examination revealed a parovarian cyst with normal ovary and fallopian tube. Post-operative period was uneventful and the patient was discharged on the eighth postoperative day.

**Discussion**

Parovarian cysts constitute 10 to 33% of adnexal masses and are usually seen in the 3rd and 4th decades of life. These cysts may vary from small lesions to larger ones. Small cyst may remain undiagnosed but larger cyst usually presents with conditions due to pressure effect or swelling. In this case also the patient presented with slow-growing abdominal mass. Patient may present to the emergency department with torsion, hemorrhage or perforation of the cyst. As these cysts do not have a pedicle and they expand within the leaves of broad ligament these complications are also very rare. At times, the patient may present with neoplastic change. No classification has been done till now on the basis of size. Our patient presented with huge mass. These cysts are usually benign. The advanced imaging studies and tumor markers must be performed to rule out any underlying malignancy. Surgery is the only definitive treatment. In this patient, the clinical examination was suggestive of a cystic mass which on imaging was provisionally diagnosed as parovarian cyst. Further tumor markers, i.e., CA 125, CA 19-9, CEA, beta HCG and AFP estimation ruled out malignancy. A huge tumor of such physical dimension definitely requires surgery and hence laparotomy is necessitated. Excision of the cyst with salvation of ipsilateral ovary and fallopian tube should be considered for future childbearing and it can be performed by laparoscopy or laparotomy. Histologically, parovarian cysts can be described as papillary serous cystadenoma, borderline tumor and endometrial sarcoma.
Conclusion

Patients presenting with large paraovarian cysts need surgical treatment and the tumor can be removed by laparotomy. If the cyst can be separated from ovary and fallopian tube, attempt should be made to conserve the ovary and fallopian tube by considering ovariopexy.

Conflict of Interest: None

References


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