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Huge Mucinous Cystadenoma: A Rare Abdominal Mass in Adolescent

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Abstract

Mucinous cystadenoma (MCA) are rare benign neoplasm in adolescent age group. Only few cases have been described before and they often present as large abdominal masses. We present a case of MCA for its rare occurrence in 14 years old girl that had a huge mass arising from the left ovary and causing right mild hydro uretero nephrosis with early obstructive nephropathy. Unilateral salpingo- oophorectomy is usually sufficient treatment for these cases. The diagnosis of MCA should be considered in adolescent who present with huge pelvi-abdominal masses. Early recognition and intervention are necessary to avoid potential complication.

Keywords: *Mucinous cyst adenoma of ovary, salpingo-oophorectomy, adolescent age*

1. Introduction

Ovarian mucinous cystadenoma is a benign tumor that arises from the surface epithelium of the ovary. It is a multi-locular cyst with smooth outer and inner surfaces. It tends to be huge in size. Of all ovarian tumors, mucinous tumours comprise 15% [1,2]. About 80% of mucinous tumors are benign, 10% are border-line, and 10% are malignant. Although benign ovarian mucinous tumors are rare at the extremities of age, before puberty and after menopause [3], they are common between the third and the fifth decades [4]. The most frequent complications of benign ovarian cysts, in general, are torsion, hemorrhage, and rupture. As it contains mucinous fluid, its rupture leads to mucinous deposits on the peritoneum (pseudomyxoma peritonei). We presented a case of MCA in 14 years old girl for its rare occurrence.

Case

The patient is a 14-year-old female who presented at our surgical department with a gradually increasing abdominal swelling first noticed four months ago. There was no history of colicky pain, fainting attacks, vomiting or other gastrointestinal attacks. She had no previous history of any illnesses, allergies, or operations. Her menarche commenced at the age of 13 year with subsequent irregular cycles. On general examination she weighed 48 kg, and vital signs were normal. There was no icterus, edema, or lymphadenopathy. On abdominal examination ill defined pelvi-abdominal mass was noticed extending upto xiphi-sternum. Intestinal sounds were normal. External genital examination was normal.

Based on sonographic examinations, a huge multiseptate cystic SOL seen in the abdomen extending from pelvis to xiphisternum and occupying most of abdominal space ? ovarian cyst leading to right sided hydronephrosis, was noted. Abdomino-pelvic computerized tomography (CT) findings were consistent with a large well defined cystic lesion of size app. 130×228×291mm seen in pelvic fossa extending upward upto hypochondrium occupy most of peritoneal cavity, abutting anterior wall producing mass effect over adjacent abdominal viscera and vessels, mild free fluid in peritoneal cavity, right mild hydroureteronephrosis with early obstructive nephropathy (Figure 1). She was having TLC-5600/µL, Hb-10.1gm/dl, CA125-14.5U/ml, normal RFT and LFT.

Fig.1 CT scan image of ovarian tumor

Our patient & her relatives were counseled and signed informed consent for exploration laparotomy. Under general anesthesia, abdomen was opened by midline incision where a huge cystic mass was noticed arising from the left ovary. Later on, the incision was extended

up, about 8 cm below xiphisternum, to deliver the cystic mass intact without risk of intra peritoneal rupture. The outer surface of the mass was smooth and intact all around without external growths or adhesions (Figure 2).

Fig. 2 Intraoperative image

Fig.3 Specimen image

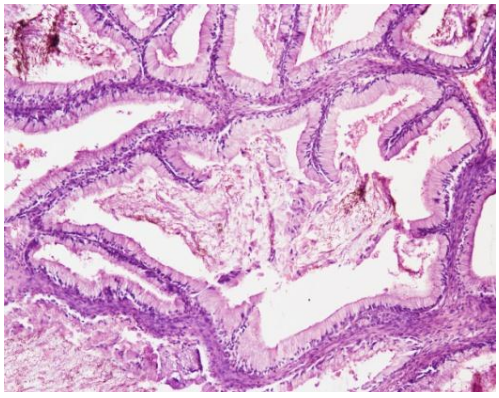

Fig. 4 Microscopic image

The uterus, right adenexa, and appendix were looking healthy. Mild ascites was drained out. No enlarged para aortic lymph nodes were discovered. Left salpingo-oophorectomy was performed as the whole ovary was involved in the mass and the left tube was abnormally dilated and adherent to the mass. The size of the tumor was 30 X 23 X 13 cm with 6 kg. in weight (Figure 3). Histo-pathological examination revealed mucinous cystadenoma of overy (Figure 4). Postoperative recovery was uneventful and the patient was discharged on the 6th postoperative day to be followed-up every 3 months.

Discussion

Differential diagnosis of ovarian masses include functional cyst, benign or malignant ovarian neoplasm, torsion with consecutive edema, and involvement of ovary in lymphoma, leukemia or metastatic diseases[5,6]. Benign MCA are rare neoplasm in adolescent age group with few cases reported in literature [7]. The diagnosis can be delayed because of the slow growth of these tumors, nonspecific symptoms and rarity of these tumors leading to delayed treatment [8]. Our patient had nonspecific symptoms for a few months before her presentation. Because of late presentation, mass was feeling the whole pelvi-abdominal cavity. This is compatible with previous reports[7]. The tumor arouse from the left ovary, which is in concordance with previous reports that describe a predilection of these tumors to the left ovary [7]. The most common symptom is increased abdominal distention and discomfort as it was in our case. Unilateral hydronephrosis has also been described previously [7] as it was also in our case because of urinary outflow obstruction as her mass was huge and compressed the ureter. The treatment of these patients is surgical. Unilateral salpingo-oophorectomy is usually sufficient treatment [6,7]. If the contra lateral ovary looks normal at exploration, biopsy is not necessary as it may lead to adhesion formation and may jeopardize future fertility [9]. No cases of tumor recurrence in contra lateral ovary have been described. Our patient had unilateral salpingo-oophorectomy, the contra lateral ovary was inspected to be normal and therefore biopsy was not taken.

In conclusion MCA are rare tumors in adolescent, they often present as large pelvic-abdominal masses with non-specific symptoms. Doctors may consider the diagnosis of MCA if a young patient presents with a pelvic-abdominal mass. Conservative surgery (unilateral ovarian cystectomy and salpingo-oophorectomy) is adequate for these benign ovarian neoplasms. Early recognition and intervention is necessary to avoid potential complications.

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