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Case Report

Mucinous cystadenoma of ovary: are mammoths really extinct?

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ABSTRACT

The most common ovarian tumours are epithelial tumours. 80% of all tumours are benign, 10% borderline and 10% are malignant. Mucinous tumours represent 8-10% of the epithelial tumours; they may reach enormous size filling the entire abdominal cavity. We report here a case of a huge benign mucinous cystadenoma in a 57-year-old female. Ultrasound and MRI scan showed a large left ovarian cyst. CA-125 was 132 IU/ml. She underwent total abdominal hysterectomy and bilateral salpingo-oophorectomy with appendicectomy and infracolic omentectomy. Her post-operative course was unremarkable.

Keywords: Cystadenoma, Mammoth, Mucinous

INTRODUCTION

Ovarian mucinous cystadenoma is a benign tumour that arises from the surface epithelium of the ovary. Mucinous tumours comprise 15% of all ovarian tumours.^{1,2} About 80% mucinous tumours are benign, 10% borderline and 10% malignant. They are second commonest type of epithelial ovarian tumours. Most are benign and can be very huge. Hence, they are also called mammoth tumours. The most frequent complications of benign ovarian cysts are torsion, haemorrhage and rupture. Pseudomyxoma peritonei can occur if tumour ruptures and spills its mucinous deposits on the peritoneum.³ We report here a case of massive ovarian cystadenoma. Giant ovarian cystadenomas are rare in modern world due to increased awareness and better diagnostic facilities.

CASE REPORT

A 57-year-old postmenopausal lady, from Lebanon, P3L3 presented to the OPD with complaints of pain in the lower abdomen and fullness since 2 months. She also had constipation. On enquiry she also gave history of loss of

weight and appetite over the past few months. She had no dyspnea, chest pain or any respiratory symptoms. She had history of a stroke 2 years back for which she had taken treatment. She was not on any medication currently. She was postmenopausal since 7 years and had 3 normal deliveries.

General examination was normal except for distended abdomen resembling a pregnant uterus. Respiratory and cardiovascular system examination findings were normal. On per abdominal examination, a 36 weeks size mass was felt arising from the pelvis which was firm, irregular and mobility was restricted. On per vaginal examination, right fornix was bulging. Uterus could not be felt separately. The left fornix was free.

Ultrasound revealed a 22×15×17 cm cystic mass with solid components in pelvis probably arising from the right ovary. Uterus and left ovary were normal. MRI revealed large thin walled cystic abdominopelvic structure on right side which could be borderline or malignant ovarian neoplasm. Her CA-125 was 132 IU/ml.



Figure 1: Cyst in right ovary.



Figure 2: 1.5 litres mucinous fluid suctioned out.

After counselling about malignancy risk and medical issues involved, high risk consent was taken and anaesthesia fitness was done. The patient was posted for exploratory laparotomy. Under spinal and epidural anaesthesia, a midline vertical incision was taken.

Intraoperatively a 20×15×15 cm smooth, regular cyst was seen arising from right ovary. Left ovary was normal. Uterus and both fallopian tubes were normal Figure 1.

Peritoneal fluid was aspirated and sent for cytology. Decompression sutures were taken over ovarian mass and 1.5 litres of mucinous fluid was suctioned and mass decompressed Figure 2.

This was followed by total abdominal hysterectomy and bilateral salpingo-oophorectomy. Appendectomy and infracolic omentectomy were also done. The patient withstood the surgery well with no intraoperative or postoperative complications.

Postoperatively patient was given low molecular weight heparin for 72 hours considering past history of stroke. She recovered well and was discharged on day 6. She lost approximately 4.8 kg weight postoperatively after removal of the mass.

Histopathology report was suggestive of mucinous cystadenoma of the ovary.

DISCUSSION

Mucinous cystadenomas have origins from inclusions and invaginations of the ovarian coelomic epithelium and persistence of Mullerian cells or from Wolffian epithelium.⁴ Although benign mucinous cystadenomas are rare at the extremities of age, before puberty and after menopause, they are common between third and fifth decades.^{3,5}

Grossly these tumours appear as round, ovoid or irregularly lobulated growths with a smooth outer surface of whitish or bluish white hue. Only 10% mucinous cystadenomas are bilateral. The content of the cyst is generally a clear viscid fluid which can be sometimes very thick or thin. The cut surface shows the cavity to be divided by septa into number of compartments or locules. Histologically, mucinous cystadenoma is lined by tall columnar non-ciliated epithelial cells with apical mucin and basal nuclei. They are classified according to the mucin producing epithelial cells into three types. The first two include endocervical and intestinal epithelia. The third type is Mullerian which is associated with endometriotic cysts.⁶

The most frequent complications of benign ovarian cysts are torsion, haemorrhage and rupture. Mucinous tumours of the ovary are usually evaluated using ultrasound, computerised tomography scan or magnetic resonance imaging. Tumour markers also aid in diagnosing the origin of tumour.³

In the modern era of medicine, such huge mucinous ovarian tumours have become rare in the current medical practice as most of the cases are diagnosed early during routine gynaecological examinations or incidental finding on ultrasound. Most patients with large tumours present with pressure symptoms over genitourinary system leading to urinary complaints and respiratory system leading to respiratory embarrassment.

The dilemmas in this patient were late presentation, increased CA-125 despite benign nature of the tumour, associated medical co-morbidity, time constraint since the patient was a medical tourist and visiting India only for her health issues.

The patient came looking like a pregnant woman and went home with a flat abdomen. Extra-large benign and malignant cysts of the ovary are uncommon and involve diagnostic and management challenges. Detection of ovarian cysts causes considerable worry for women because of fear of malignancy but fortunately majority of ovarian cysts are benign. Cancer antigen CA-125 can help to identify epithelial tumours of the ovary.⁷⁻⁹

CONCLUSION

Extra-large benign and malignant cysts of the ovary are uncommon and involve diagnostic and management challenges. Detection of ovarian cysts causes considerable worry for women because of fear of malignancy but fortunately majority of ovarian cysts are benign.

Despite of rise in CA-125 levels, cysts can be benign and management of ovarian cysts should be individualised depending on the patient's age, the size of the cyst and its histopathological nature. Conservative surgery as ovarian cystectomy and salpingo-oophorectomy is adequate for benign lesions.

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