

Halving of body weight: a case of an ovarian mucinous cystadenoma

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Summary

Benign, mucinous cystadenomas account for 15% all ovarian neoplasms and of these, giant variants occur rarely. Ovarian masses, particularly mucinous cystadenomas, are among the largest tumours known. Surgery is the treatment of choice for a large mucinous cystadenoma.

In this report we present an interesting case of an ovarian mucinous cystadenoma weighing 40 kg. Surgical treatment was successful and the patient adjusted well to her postoperative body image.

Key words: Mucinous cystadenoma.

Introduction

Benign, mucinous cystadenomas account for 15% of all ovarian neoplasms. Of these, giant variants rarely occur [1]. An ovarian mucinous cystadenoma does not usually cause symptoms until it becomes very large. Ovarian masses, particularly mucinous cystadenomas, are among the largest tumours known. In 95% of the cases the tumour is unilateral and malignant transformation is uncommon. Nevertheless, the potential for malignant change necessitates histological diagnosis and appropriate management [2].

Mucinous cystadenomas are usually asymptomatic, but patients may present because of an abdominal mass or non-specific abdominal discomfort [2]. Therefore, when evaluating a patient for non-specific abdominal complaints, a gynaecologic examination must always be performed and a high index of suspicion for pelvic pathology must be maintained.

An interesting case of an ovarian mucinous cystadenoma weighing 40 kg is presented.

Case Report

A 56-year-old woman presented to the medical ward with a two-month history of abdominal swelling. Her weight was 95 kg. There were no complaints with regards to change in bowel habits or dysphagia. She had not had any episodes of rectal or vaginal bleeding. General physical examination was unremarkable. Abdominal girth measured 137 cm with positive fluid thrill and possibility of an ovarian cyst. An umbilical hernia was also present. An urgent computed tomography (CT) scan of the abdomen and pelvis was performed which showed a huge complicated cystic mass (35 by 33 cm) filling the abdomen. It was mainly cystic but contained some solid elements and was thought to most likely be ovarian in origin. The liver, spleen and kidneys were normal and a fibroid uterus was seen.

Serum CA125 was 231 mIU/l. Gynaecological assessment was requested and following this a joint gynaecological and surgical procedure was arranged. The patient underwent total abdominal hysterectomy, bilateral salpingo-oophorectomy, umbilical hernia repair and abdominoplasty under general anaesthesia. At surgery a huge ovarian cyst was freed from some peritoneal and omental adhesions. The cyst weighed 40 kg and contained 35 l of fluid. The uterus measured 7 cm from the fundus to the external cervical os. There were two subserosal fibroids. The first measured 6.5 cm in diameter and the second near the left broad ligament measured 4.5 cm in diameter. The entire specimen (uterus) weighed 219 g. The left ovary looked normal. The redundant abdominal wall was excised and sutured transversely. Postoperatively the patient did well and made good progress. Histological examination revealed benign mucinous cystadenoma of the left ovary with no evidence of malignancy and benign uterine leiomyoma. The sections from the uterus showed atrophic inactive endometrium and no atypical hyperplasia or malignancy was seen. There was no CIN or CGIN of the cervix. The right ovary and fallopian tubes were normal.

Discussion

Ovarian tumours are classified on the basis of tumour origin as epithelial tumours (serous and mucinous tumours, endometrioid and clear cell carcinoma, Brenner tumour), germ cell tumours (mature and immature teratoma, dysgerminoma, endodermal sinus tumour, embryonal carcinoma), sex cord-stromal tumours (fibrothecoma, granulosa cell, sclerosing stromal, and Sertoli-Leydig cell tumour), and metastatic tumours [3].

Benign mucinous cystadenomas represent 15% of all ovarian neoplasms and are generally unilateral, with bilateral occurrence in only 10% of cases [1]. These types of ovarian neoplasms are thought to arise from the ovarian surface epithelium by a metastatic process.

When evaluating women with non-specific abdominal complaints, a thorough abdominal and gynaecologic examination should always be performed, with attention to the adnexae. The U. S. Preventive Services Task Force does not recommend routine screening of asymptomatic women for ovarian malignancy. However, examination of

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Fig. 1



Fig. 2



Fig. 3

Figure 1. — Ovarian mucinous cystadenoma - appearance before the operation.

Figure 2. — Ovarian mucinous cystadenoma - gross specimen from the patient.

Figure 3. — Haematoxylin and eosin stained section of cyst wall showing the full thickness of the inner lining of columnar mucinous epithelium in original magnification x 110.

the adnexae is recommended when a pelvic examination is performed for other indications [4].

Diagnosis of these tumours begins with a careful history and physical examination based on clinical suspicion. Abdominal ultrasonography has been shown to be quite useful in determining the malignant potential of tumours. Moyle *et al.* [5] showed that anechogenic lesions are more likely to be benign. As the echogenicity increases, so does the likelihood of malignancy [5].

Computerized tomography is commonly used to aid in the diagnosis of large abdominal masses. Abdominal CT scanning, using oral and intravenous contrast, sharply delineates the mass's anatomic relationship to adjacent structures. When a patient has a large abdominal mass, it is imperative that the gastrointestinal tract and renal system be evaluated preoperatively. Obstruction of the gastrointestinal tract or a laterally displaced ureter, either of which may be due to mass effect, can cause an intraoperative catastrophe for the unwary surgeon [1].

Surgery is the treatment of choice for a large mucinous cystadenoma. Once the abdomen is entered and the large mass is isolated, resection of the tumour is the next essential step. This can be accomplished by en bloc removal of the tumour, with or without controlled drainage of tumour fluid. Removal of the tumour en bloc is thought by some to decrease the risk of spilling malignant cells, if present [6]. Controlled drainage, while it may increase the risk of spillage, is felt to be a superior technique to improve exposure and prevent the phenomenon of supine hypotension syndrome [1].

Postoperative management of the patient should be aggressive, with safe, rapid weaning of mechanical ventilation, nutritional support if necessary, and mobilisation as soon as possible. These patients often have body image problems after the operation and psychiatric consultation may help the patient adjust to her body image [1]. In summary, this is a case report of a patient with a massive ovarian cyst which weighed about half as much as the patient herself. Surgical treatment was successful and the patient adjusted well to her postoperative body image.

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