A Huge 42 Liters’ Adnexal Mucinous Adenocarcinomas Cyst: A Case Report

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ABSTRACT

Mucinous carcinoma is a tumor composed of gastrointestinal-type cells with intracytoplasmic mucin. They are unilateral solid-cystic masses. A 38-year-old G2 L2 woman with a complaint of rapidly increasing severe abdominal distension was referred. Surgery was performed and a huge complicated mass showed up. We sucked about 42 liters of brown color fluid out of the cyst and then we could extract the residual mass. Chemotherapy protocol began under the supervision of oncologic service. Despite diagnostic delay, before any dissemination the cystadenocarcinoma was removed. To our best knowledge, our patient had the biggest tumor among other previous case presentations.

Keywords: Adnexa, Mucinous Adenocarcinomas, Cyst

Introduction

Mucinous cystadenoma is a common adnexal neoplasm, and origins from inclusions and invaginations of the ovarian coelomic epithelium and persistence of Müllerian cells, or from Wolffian epithelium and teratomas (1). It usually happens in 40-50 years old women and consists 8-15% of all ovarian tumors. The incidence rate will increase in menopause and more than 55 years old cases (2). Because of the pressure inside the cyst, the pathology is usually cylindrical and mono- or multi-stratified, and cuboidal epithelium with clear cytoplasm. Also, it has a hyperchromatic nucleus at the base. There are some case reports which present mucinous cystadenoma and cystadenocarcinoma s in huge sizes (10cm<) (3-5). This tumor is reported to occur in middle-aged women. Here we presented a unique patient with 42 liters’ adnexal mucinous adenocarcinoma’s cyst.

Case presentation

A 38-year-old G2 L2 woman came to our emergency department with a complaint of rapidly increasing severe abdominal distension (during four months) and three weeks of upper abdominal pain gradually worsened until presentation. She could not lie down, due to the pain and dyspnea, and so she sat upright. She complained of nausea and constipation during the previous three weeks, with no vomiting or diarrhea attacks. During the past four months, she gained 10 kg weight and low-grade fevers on nights. Due to the underlying anxiety disorder and phobia of malignancy, she did not perform any work up before admission.

She denied any urinary symptoms and vaginal bleeding or discharge. She had a regular menstruation period (last menstrual period was two weeks prior) with condoms as contraception. No family history of malignancy reported.

She had two prior cesarean sections nine and six years ago, and also, she suffered from type II diabetes treated with oral agents for two years ago.

On physical examinations, she was pale with bitemporal atrophy. On vital signs: heart rate 118 beats/min, and blood pressure was 146/103 mmHg with no fever. She was tachypneic with a rate of 33 breath/min. Other respiratory system examination and...
cardiovascular findings were normal. The weight was 82 kg and the height was 169 cm. On abdominal examination, there was a huge and tense distension. The skin over the abdomen became thinned and shiny with no focal tenderness, rebound, or guarding (Figure 1).

Then the Patient admitted to the intensive care unit and a portable abdominal ultrasonography performed, which showed a huge cystic mass with several internal septum extending from the pelvic area to the diaphragm. A computed tomography (CT) scan of the abdomen and pelvic and endoscopy and colonoscopy was advised, because the source of the mass was unclear, but unfortunately, due to the size of the abdomen it could not be performed. Laboratory tests showed Hemoglobin=5.6 gr/dl and four-unit packed cells iso-group iso-RH infused. Other hematological parameters were in the normal range. CA-125 level was 870 IU/ml and other tumor markers such as α-fetoprotein and human chorionic antigen were normal were in the normal range.

On the next day, surgery was performed. The procedure began with a mid-line incision and the fascia and abdominal muscles retracted. A huge, complicated mass showed up extending all over the abdomen, and we could not extract it intact. So, we made an incision on the mass wall and sucked about 42 liters of brown color fluid out of the cyst. Then we could extract the residual mass (Figures 2-4).

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Figure 1. Abdominal huge distention

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Figure 2,3,4. The huge residual mass
The mass was originated from the right adnexa and there were so many loose adhesions to all over the abdominal walls, intestines and uterine. Frozen section biopsy showed mucinous cystic adenocarcinoma and, as much as possible, we released the adhesions and total abdominal hysterectomy and bilateral salpingo-oophorectomy and omentectomy, due to the massive adhesion, performed. There were no signs of liver or intestinal involvement, and no pathologic lymph node showed up. Finally, a Hemovac drain was inserted and surgery finished. Seven units packed cells iso-group iso-RH and two units’ fresh frozen plasma was infused during the operation. The patient was transferred to the recovery unit with stable situation.

Then the patient was transferred to the intensive care unit for five days. Table-1 shows the post-op laboratory findings. The biopsy report was mucinous cystadenocarcinoma stage IIC. After 10 days, complete suture removal was done, wound was healthy and patient was transferred to another hospital and chemotherapy protocol began under the supervision of the oncology service: Paclitaxel (Taxol) 175 mg/m2 and Carboplatin 5-6 AUC every three weeks for six courses.

Table 1. Laboratory findings

<table>
<thead>
<tr>
<th></th>
<th>On admission</th>
<th>Before surgery</th>
<th>1th day post-op</th>
<th>10th day post-op</th>
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<tr>
<td>White blood cell</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Neutrophil/Lymphocyte)</td>
<td>114000</td>
<td>125000</td>
<td>121000</td>
<td>9000</td>
</tr>
<tr>
<td></td>
<td>(78%/12%)</td>
<td>(80%/14%)</td>
<td>(82%/15%)</td>
<td>(80%/11%)</td>
</tr>
<tr>
<td>Red blood cell</td>
<td>2.5 x10⁶</td>
<td>3.4 x10⁶</td>
<td>4.2 x10⁶</td>
<td>4.4 x10⁶</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>5.6</td>
<td>9.2</td>
<td>8.1</td>
<td>10.2</td>
</tr>
<tr>
<td>Platelets</td>
<td>158 x10³</td>
<td>146 x10³</td>
<td>139 x10³</td>
<td>137 x10³</td>
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<tr>
<td>Creatinine</td>
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<td>0.8</td>
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<td>Liver function tests</td>
<td>Normal</td>
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<td>Normal</td>
</tr>
<tr>
<td>INR</td>
<td>1</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>Electrolytes</td>
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<td>Urine analysis</td>
<td>Normal</td>
<td>Normal</td>
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</tbody>
</table>

Discussion

Because of the large number of etiologies of abdominal distension, such as obesity, intestinal tumors, pregnancy, hydrenephrosis etc., it is difficult to diagnosis of adnexal masses. So, it is important to take a precise history of endometriosis, null parity, infertility, early menstruation or late menopause. Also, it may be with a positive family history of ovarian or breast cancer. Pelvic transvaginal ultrasonography is a useful imaging modality in the diagnosis.

As time passes, in the young patients, many of the ovarian cysts reabsorb spontaneously. So, a careful follow-up by ultrasonography is of importance. On the other hand, in post-menopausal cases with cysts over 5 cm and in patients with benign cysts over 8 cm, cystectomy should be considered. These huge masses have a strong risk of malignancy and, to prevent of perforation, it should be resecting through laparotomy (5, 6).

Mucinous neoplasms of the ovary, include benign (mucinous cystadenoma and adenofibroma), Borderline (atypical proliferative) and carcinomas, represent 10%–15% of ovarian mass which most of them are benign. Other common benign adnexal masses are dermoid cysts and Brenner tumors (6). Mucinous carcinoma, as WHO defines, is a malignant tumor composed of gastrointestinal-type cells containing intracytoplasmic mucin. They are unilateral masses with both solid and cystic components (5).

The time lag between the start of symptoms and treatment is so critical, especially because of the nature of the ovarian tumors, which have shorter symptom-to-visit interval. Unfortunately, the delay in diagnosis results in poor prognosis. Our patient presented late with a gradual distension of the abdomen to stage IIC of tumor. The cystadenocarcinoma was removed before any dissemination, despite the diagnostic delay. Same as our patient, there are some other case presentations of ovarian huge mucinous cystadenomas. For example, Gorgone et al. presented a 17-year-old woman with a giant (20cm) right ovary mucinous cystadenoma (7) and Jones et al. reported a giant mucinous cystadenoma of right ovary (21kg) (8). But, to our best knowledge, our patient had the biggest tumor among other previous case presentations. Our
patient underwent chemotherapy same as other (7, 8) and surgery procedure was in the same way either.

Conclusion

Here we present an unsuspected development of a malignant giant abdominal tumor in a woman from the right adnexa with uncommon conditions in primary care settings. We suggest that such patients must be referred to a medical center earlier to prevent the tumor growth to this huge size and the unstable presentation.

Financial Disclosure

We have no financial interests related to the material in the manuscript.

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Conflict of Interest

We hereby declare that we have no Conflict of interests.

Consent

Written informed consent was obtained from the patient for the publication of this report and accompanying images.

References


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