Mismanagement of a Huge Ovarian Serous Cystadenoma in a Young Girl; a Case Report

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ABSTRACT

While ovarian masses are common findings in gynecology, unusually huge masses are quite rare. However, such cases can still be found today. Mismanagement of common complaints in patients can be a leading cause of facing such findings. Herein, we introduce a case of a giant ovarian cyst, which was mismanaged in a young virgin female patient. The patient had received gastrointestinal medications for months before being admitted to our clinic, given the bloating sensation and lack of any gynecologic problems. Ultrasonography disclosed a giant cyst, probably related to the ovary, originating from the pelvis and extending toward the diaphragm. After a successful surgery, the ovarian cyst, measuring 40 centimeters and weighing 8 kilograms, was removed. Pathology report revealed serous cystadenoma. Existence of such cases can be an alarming sign for physicians to manage prevalent complaints more seriously, particularly those non-responsive to treatment.

Introduction

Ovarian masses are common findings in general gynecology. Neoplasms constitute a significant group of these tumors, which are mostly benign (1). The majority of ovarian masses are cystic, and many of them are functional which may spontaneously resolve (2).

Ovarian tumors are divided into three major categories according to their originating sites: stromal, sex cord-stromal, and surface epithelial tumors. Epithelial tumor is the dominant type which seems to develop from the genetic alterations of the ovarian surface (3). These tumors can cause multiple unspecific symptoms, though the most frequent complaint is abdominal pain (4).

Since these tumors are not always symptomatic, they can be mismanaged. Undiagnosed cysts can become so large that they can induce abdominal distension (5). Although there are plenty of diagnostic approaches for these tumors, abdominal ultrasonography is usually the first cost-effective and simple tool for the diagnosis of abdominal masses (6). In this report, we discuss a case of large serous cystadenoma, which was mismanaged due to misdiagnosis, in a 27-year-old virgin female patient.

Case presentation

A 27-year-old female patient from rural areas referred to our clinic due to a three-month dull abdominal pain, followed by gastrointestinal upset. During these three months, the patient had attributed her abdominal distension to bloating. The patient visited a general physician given her symptoms, which were diagnosed as gastritis and treated by antacid medications. However, the symptoms did not completely resolve and constipation without any urinary symptoms was added to the symptoms.

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Gradually, mild respiratory distress occurred and given the exacerbated abdominal pain, the patient was referred to a gynecology clinic. The patient declared no previous gynecologic problems or menstrual irregularity. In physical examination, there were no positive findings, except epigastric pain with diffuse abdominal distension and moderate epigastric tenderness without guarding.

No well-defined mass was detected on palpation. Ultrasound examination disclosed a huge cystic mass, probably an ovarian cyst, filling the whole abdomen from the pelvis to underneath the diaphragm. Therefore, the patient was hospitalized and advised for surgery. Laboratory tests including complete blood count, cancer antigen-125, and carcinoembryonic antigen were all within the normal limits.

The surgery was performed by general anesthesia and a vertical incision. Laparotomy illustrated a huge multilocular cystic mass, originating from the left ovary in the pelvis and extending beneath the diaphragm. A yellow-grayish-colored tumor, which had completely destroyed the ovarian tissue, was detected, and the whole cyst and ovary were removed (Figure 1).

Although there were adhesions to the surrounding tissues, the tumor was completely extracted without any ruptures. Pathology report was consistent with serous cystadenoma (Figure 2). The patient did not have any medical problems during the two-year follow-up and she has been completely healthy to date.

**Discussion**

Surface epithelial tumors, originating from the ovarian surface epithelium, account for 60% of all ovarian tumors and 90% of malignant ovarian tumors (3). These tumors do not show invasive behaviors or exuberant cell proliferation; thus, they are considered as benign lesions.

Ovarian serous tumors are considered as a subtype of surface epithelial tumors. These tumors are thin-walled cysts, filled with straw-colored fluids. The internal surface of the cyst might have few papillary projections (3). Although they are usually benign, relatively indolent serous and mucinous carcinomas can arise from pre-existing cystadenomas (7).

Serous cystadenomas tend to be multilocular and are mostly left-sided, as in our case (4). These tumors mostly produce non-specific and mild symptoms. Abdominal pain, distension or discomfort, urogenital symptoms, and menstrual irregularity are some other symptoms. Sometimes, neglected or misdiagnosed tumors (similar to our case) can become so huge that they seem like a term pregnancy (4).

Young et al. reported irregular menstruation, abdominal distension, constipation, and urinary frequency in a 24-year-old patient with right ovarian tumor, while our patient was referred to our clinic by constipation and abdominal distension, without any menstrual irregularity (8). Similarly, Ciftci et al. reported an ovarian serous cystadenoma in a young girl. Their patient had a one-year history of gradual abdominal swelling, which was accompanied by constipation and vague abdominal pain. By successful laparotomy, a 35×25×25 cm mass had been removed (5).

There are also other reports of giant ovarian cystadenomas. Sujatha et al. reported a 60×47×30 cm mass, which was not caused by
mismanagement (9). However, not all cases are so easily detected. In fact, the diagnosis of these tumors can be completed by rectovaginal examination (4). Considering the patient’s virginity, we did not perform this examination and proceeded with imaging techniques (4).

Ultrasonography seems to be useful in making the initial diagnosis of an ovarian mass. Moreover, magnetic resonance imaging and computed tomography are helpful in confirming the diagnosis of masses (4). Diagnostic laparoscopy can be used in masses of uncertain etiology, as well.

Surgery is the treatment of choice for serous cystadenomas. Unilateral salpingo-oophorectomy is commonly considered in huge tumors (7). However, performing a successful laparoscopy without rupturing or other associated complications for giant cases is only reported in a few cases (10). In our case, given the large size of the tumor, salpingo-oophorectomy was performed by the surgeon.

Despite the latest achievements in healthcare services and imaging techniques, many giant ovarian cysts have been reported over the past decades. Existence of such cases can be an alarming sign for physicians and health care providers. In our patient, prolonged misdiagnosis and mistreatment had resulted in the condition. Overgrowth of the mass had destroyed the whole ovarian tissue, which led to the complete removal of the ovary.

It is suggested that every female patient with chronic, persistent, or intermittent pain in any region of the abdomen or pelvis be at least evaluated by imaging techniques, especially if there is no response to the treatments. In fact, earlier diagnosis is associated with less invasive treatment approaches and prevention of tissue destruction.

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References