Large abdominal cystic masses: Report of seven cases

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Abstract

Cystic abdominal tumours are encountered quite often and are diagnosed more frequently due to the availability of better imaging possibilities. Presentation of huge cysts has become rare as most of them are diagnosed and treated early. But we still have patients with enlarged abdominal cysts; majority with cases of serous cystadenomas of the ovary. Absolute diagnosis is only possible with laparotomy and histopathological findings. In this report, seven patients with enlarged gynaecological or mesenteric cystic masses and gastroenterological symptoms are reported. Four of these cases were serous cystadenoma, two were mucinous cystadenoma and one was a paratubal cyst. Gynaecological tumours and mesenteric cysts should not be missed in female patients showing gastrointestinal symptoms.

Keywords: Abdominal mass, Mesenteric cyst, Ovarian cystadenoma.

Introduction

Abdominal mass is an important finding at an abdominal examination. A patient with an abdominal mass frequently presents with ambiguous or no symptoms at all. The solid-cystic mass discrimination is performed with an ultrasound. Mesenteric cysts are rare and may be asymptomatic or present with abdominal pain, distention, nausea, vomiting and constipation.[1] They are identified in approximately 1 in every 100,000 adult hospital admissions.[2,3]

Serous and mucinous ovarian cystadenomas are generally seen in women in 20-35 years age group.[4-6] In persistent simple ovarian cysts larger than 5-10 cm, especially if symptomatic and complex, surgical removal should be considered.[7]

Here we report seven cases with enlarged abdominal cystic masses that presented with gastrointestinal symptoms being abdominal pain, distention, constipation, fullness and bloating.

Case Presentations

Case-1

A 38-year-old woman presented in March 2012with abdominal pain and distention which had lasted for 6 months. Ultrasonography of the abdomen and pelvis revealed a mass resembling endometrioma (10x6x5 cm of the diameter). The cystic mass was removed laparoscopically. Histopathology showed a benign cyst lined with a single layer of mucinous columnar epithelium. Symptoms of the patient resolved postoperatively.

Case-2

A 35-year-old woman showed up in January 2014with complaints of abdominal distention and constipation that had lasted for a year. An abdominal mass was detected during the physical examination and this finding was confirmed by ultrasonography which revealed a cystic mass with a size of 25x21cm, with a regular contour and an uncertain origin. Magnetic resonance imaging (MRI) of the abdominopelvic region revealed a large, well-demarcated cystic mass. The patient underwent exploratory laparotomy and a huge pelvi-abdominal mesenteric cyst (30x35 x25cm) originating from the paratubal region was seen which was removed en bloc. Pathological examination of the lesion revealed a benign paratubal cyst that was lined with ciliated tubal columnar epithelium showing focal papillary projections. During the patient follow-ups, abdominal distention relieved rapidly and constipation resolved gradually.

Case-3

A 24-year-old woman presented in August 2013with abdominal distention without pain, and constipation lasting for a year. During the physical examination, her abdomen was distended. Percussion note was dull all over the abdomen with positive fluid thrill. Ultrasound showed a cystic abdominal mass with a size of 26x23x10cm. Origin

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of the cyst was suspected to be ovarian. She underwent a laparoscopic surgery and the histopathological diagnosis of the lesion was a simple serous cyst of the right ovary.

Case-4

A 24 year-old woman presented in September 2013with one-month history of abdominal distention. Ultrasound showed a mass with a size of 21x20x8cm and cystic quality. The patient underwent laparoscopic surgery. The right proximal tuba and cyst were removed. During the pathological examination, the cyst was found to be a serous papillary cystadenoma. The patient's recovery was uneventful.

Case-5

A 62-year-old woman presented in November 2013with abdominal pain and distention. During the physical examination, large mass with no certain margin was palpable in the left lower quadrant and pelvic region. Ultrasonography detected a cystic mass. At the surgical exploration, the encapsulated and firm mass was found near the sigmoid colon and had a diameter of nearly 15cm, compressing the urinary bladder. It was resected en bloc. During the peroperative gynaecological consultation, total abdominal hysterectomy and bilateral salphingo-oophorectomy were done. The final diagnosis was serous cystadenoma.

Case-6

A 32-year-old woman presented in July 2012 with abdominal distention that had begun right after she delivered a baby about a couple of months earlier. Physical examination revealed a well-circumscribed and movable mass filling the entire abdomen. Ultrasound showed a mass with 25x20cm diameter, which was thought to be mesenteric cyst. The mass was seen attached to the left side of the sigmoid mesentery and filled with a clear liquid on laparoscopy. Liquid of 3800ml was aspirated and the cyst was removed together with the ovary. Macroscopically the tumour was a giant cystic lesion measuring 20 cm in its greatest diameter (Figure-1). The cyst wall showed between 0.1cm to 0.5 cm thickness. Microscopic sections showed a fibrous cyst lined with a serous columnar epithelium (Figure-2). Abdominal distension of the patient directly resolved after operation.

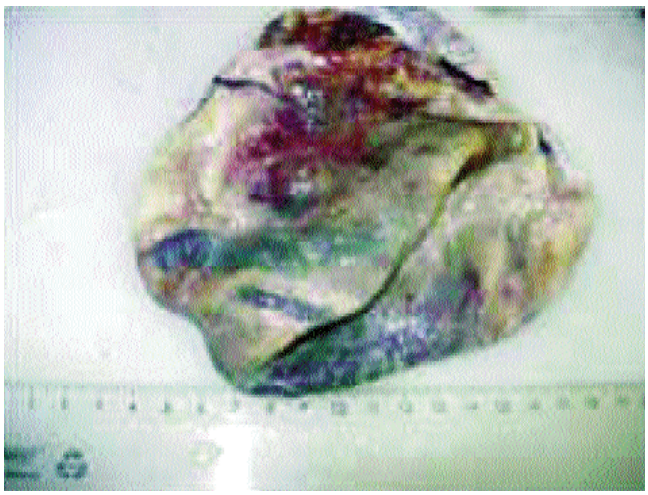

Figure-1: Photograph of a gross specimen of the tumour.

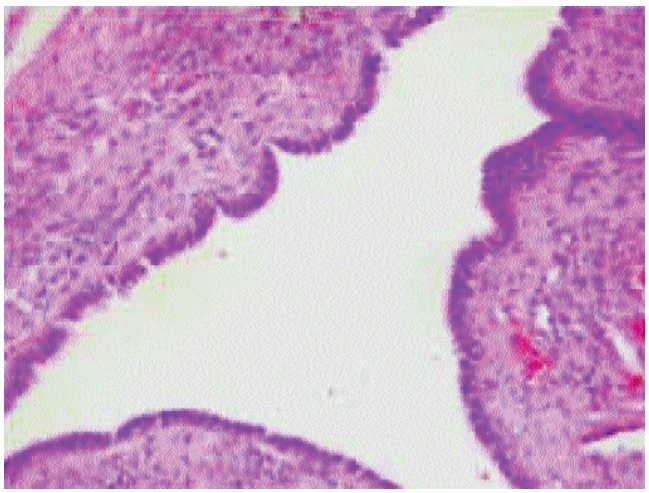

Figure-2: Haematoxylin and eosin stain, X200, cyst lined by a single layer of tall, columnar, ciliated cells, the stroma of the cyst wall contains spindly fibroblasts.

Case-7

A 28-year-old woman presented in December 2012 with right-sided abdominal distension. During the physical examination, semi-mobile abdominal mass was palpated in the mid-right quadrant. MRI and ultrasound showed a mesenteric cystic mass. During the laparoscopic cystectomy, a cystic mass with a hard wall, 10-12 cm in size and filled with serous liquid, was located at the right side of the abdominal wall and laterally in the right colon extending to the posterior. Histopathological examination of the cyst showed a benign cyst lined with a mucinous columnar epithelium. The diagnosis was mucinous cystadenoma.

Discussion

Patients with abdominal cystic masses may present with symptoms such as feeling heavy or full in the lower abdomen, acute or chronic pain, and bowel symptoms such as constipation or bloating and increased abdominal circumference. If a mass is detected, it is necessary to assess its size, surface, tenderness and mobility. After physical examination, the most helpful basic diagnostic

test is ultrasound. Further imaging techniques are ordered to determine the origin, size and the content of the mass.[8,9] The definitive diagnosis can only be done by pathological investigation.[10] Giant ovarian serous cyst adenoma of such a huge size is a rare finding. With the improvement of the imaging techniques and the increase of public awareness, the ovarian cysts are detected before they reach massive sizes. Mesenteric cysts are a rare cause of abdominal pain. Mesenteric cysts can occur anywhere in the mesentery of the gastrointestinal (GI) tract, and they may extend from the base of the mesentery to the retroperitoneum.[2,3]

In a series of 162 patients, 60% of mesenteric cysts occurred in the small-bowel mesentery, 24% in the large-bowel mesentery, and 14.5% in the retroperitoneum.[3]

In our 7 cases, 5(71%) had a size more than 20 cm in diameter and the patients presented with gastrointestinal symptoms. After the removal, 4(57%) patients were determined to have serous cystadenoma, 2(28.5%) with mucinous cystadenoma and 1(14.25%) with paratubal cyst. One (14.25%) of the patients had a mass attached on the left sigmoid mesentery; the mass was confirmed with pathology as a mesenteric cyst. For 2(28.5%) cases, the origin of these masses could only be determined through surgery and for the 1(14.25%) case of paratubal cyst, the origin couldn't be determined even after surgery, and its diagnosis was done by pathology.

All of the cases presented to the gastroenterology outpatient clinic simply because the GI symptoms, such as mild and long-standing abdominal pain, distention and constipation, were common for abdominal masses, especially when they reach a massive size. Besides, the important thing to remember is that the large cysts are usually well-margined and soft at the physical examination. The possibility of gynaecological masses should not be missed in gastroenterology practice and the management of these requires a multidisciplinary approach.

Conclusion

Mesenteric cysts and gynaecological tumours should not be missed in female patients complaining of abdominal symptoms.

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