Case Report

A Rare Form of Intraabdominal Mass: Benign Multicystic Mesothelioma

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Abstract: Benign multicystic mesothelioma of pleura and periton is a rare tumor, which is seen in middle-aged women mostly. It was defined in 1979. Even though it is a clinically benign tumor, 50% relapse is seen after surgery. It is rare in men and generally diagnosed after the examinations following surgery because of the difficulties on diagnosing.

Keywords: Benign Multicystic Mesothelioma, CT

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Introduction

Benign multicystic mesothelioma is a rare tumor originating from the peritoneal mesothelium. There is little known about its etiology. Mostly seen in middle-aged women. However, it can be seen, even though rarely, in men (1). Male: female ratio is reported as 0.24 (2). Generally, patients have a history of surgery, endometriosis or intraabdominal inflammation (1, 2). One male case in the literature has been exposed to asbestos (2). However, the role of asbestos in the etiology of benign multicystic mesothelioma is not clear (3, 4). In contrast to previously reported cases, our patient had no history of surgery. Benign multicystic mesothelioma is considered to be a reactive condition. Even though, it is acknowledged that benign multicystic mesothelioma remains benign and do not make metastasis (1), in a case report by Gonzalez-Moreno et al., a malignant transformation of benign multicystic mesothelioma was reported in a case who had surgery six times and experienced relapses (5). Pain, distension, palpable mass and complaints related to obstruction are the most common clinical symptoms (1, 2).

Case Report

A 34-year old male presented at our clinic with abdominal pain during last three months and a palpable mass on the left abdomen. A palpable mass on the left abdomen towards the pelvic area and abdominal tenderness were detected. Hemogram and biochemical parameters were in normal limits. Ultrasonography showed a multicystic mass in the left-bottom and upper quadrant and its margins could not be distinguished from pancreas. Computerized tomography of abdomen with contrast showed a lobular, hypodense, mesenteric mass in lower- and upper-left quadrants that is partly lying through right-abdomen (Figure 1). The mass was without contrast encircling SMV. At surgery, we excised the 18x10 cm cystic (Figure 2), thin-walled mass, which was pushing the small intestines and filling the left-abdomen. It was originated from the mesentery of the small intestines. Patient was stable during the post-operative term and he was discharged. Histopathological evaluation showed several cystic formations in the fibrovascular and adipose stromal tissue. The surface of the cysts had simple and cuboidal mesothelial cells.

Lymphohistiocytic inflammatory infiltration was detected in the stroma. Immunohistochemical staining was negative for CD31 and CD34 that are indicators of endothelium. However, Calretinin and Mesothelin were positive in the tissues, therefore we diagnosed our case as benign cystic mesothelioma. Patient was followed for possible relapse.

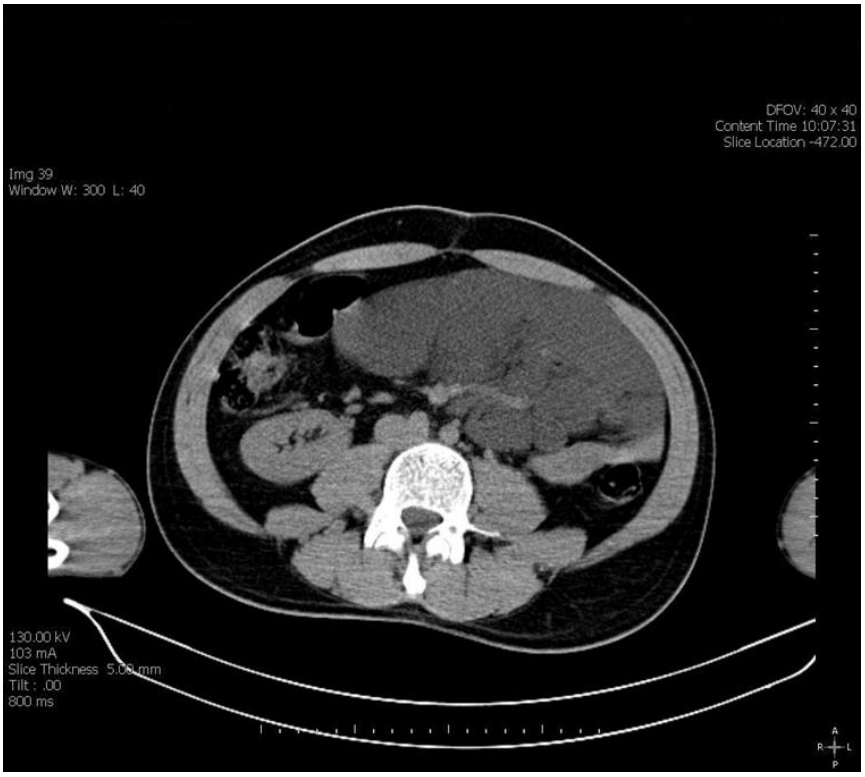

Figure-1: Computerized tomography of abdomen with IV-contrast showed a lobular, hypodense, mesenteric mass in lower- and upper-left quadrants that is partly lying through right-abdomen.

Figure-2: Cystic mass during surgery.

Discussion

Benign multicystic mesothelioma exists commonly in ovaries, fallopian tubes, colon, and pelvic flooe (3). It is hard to diagnose preoperatively (6). Cystic lymphangioma, epithelial inclusion cysts, pseudomyxoma peritonei, endometriosis and ovarian benign or malign masses should be considered in the differential diagnosis (3,7). Imaging methods, like in our case, indicates anechoic cystic masses without contrast. Ultrasound is commonly used; however diagnosis can be made easier using computerized tomography (8). Distorsions due to parallel mass effect without invasion to side organs would be detected. (1,9). Non-specific mesothelial cells are detected with fine needle aspiration biopsy, however these were not helpful for diagnosing (9). Total excision of the cystic mass is the most effective treatment. However, there is 50% relapse rate after surgery (1,4,8). Imaging techniques during the routine follow-up is important to detect relapses early. In case of relapse, cytoreductive surgery and peritonectomy are suggested (4). Chemotherapy and radiotherapy are debated, as it is a benign lesion. Sclerosant therapy with tetracycline, hyperthermic peritoneal wash, and intraoperative chemotherapy are suggested in proper cases (4,5), even though others do not suggest these therapies (9). There are researchers suggesting hormonotherapy such as anti-estrogenic treatment or gonadotropin analogs instead of surgery in case of relapse (2). The importance of total excision during surgery should be noted although the diagnosis and treatment are difficult. As the risk of relapse is high, imaging techniques during follow-up is very beneficial.

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