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# BENIGN CYSTIC MESOTHELIOMA: A CASE REPORT

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**ABSTRACT**

We report a case of benign cystic mesothelioma in the peritoneum in a young female encountered for the first time in our institute. Benign cystic mesothelioma of the peritoneum (BCM) is an uncommon lesion with some 140 cases reported since the first case described by Kannerstein M and Churg J in 1977.

**KEYWORDS**

Mesothelioma and Case Report.

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## INTRODUCTION

Cystic Mesothelioma of the peritoneum also called as multiple Inclusion cysts of peritoneum is a well-recognized but rare tumor of mesothelial origin. This tumor has been considered benign with good prognosis. We have encountered for the first time to diagnose this entity in our institution and the same has prompted us to report the case.

**Case Report**

In the present study a 25-year-old female was admitted in the surgical ward with complaints of pain abdomen for one month. The lady was married two months back. Her menstrual history was normal. On physical examination a mass was felt in the abdomen, which was tender. Clinical investigations were normal. Ultrasonography showed a

retroperitoneal mass. On laprotomy the mass was removed and sent for histopathological examination.

Grossly - It was a multilocular encapsulated cystic soft tissue mass measuring 9cm x 8cm x 7cm. Cut surface was grey-white with multiple cysts varying in size from 1cm to 3cm in diameter, filled with serious watery fluid (Figure No.1). Tissue processed and the sections were taken and stained with routine H and E.

On microscopic examination - it showed multiple cystic spaces lined by single layer of flattened to cuboidal cells separated by stroma. The nuclei were small and uniform without pleomorphism and mitotic activity. These cells were separated by thin loose connective tissue along with focal inflammatory cell infiltrate (Illustrate in Figure No.2).

IHC- The sections were subjected to immunohistochemistry and it showed reactivity to calretinin in the cells lining the cystic spaces.

**DISCUSSION**

There are three well characterized types of mesothelial tumor occurring in the peritoneum: Malignant tubulo- papillary mesothelioma, Cystic mesothelioma, and Adenomatoid tumor. Of these the Cystic mesothelioma is one of the rarest. There is a well-known relationship between prior exposure to asbestos and the development of Malignant mesothelioma[1,2] but there is no known causality for cystic mesothelioma.

Cystic mesothelioma of the peritoneum occupy a borderline position clinically between more common Adenomatoid Tumor and Malignant mesothelioma. Peritoneal cystic mesothelioma has good prognosis with a potential for local recurrence. This tumor usually occurs in the pelvis of adult females. Few cases have been seen in males[3]. Often there is a history of previous pelvic surgery. Our case is a female with no consistent past history. This is of special interest in view of the relative rarity of benign cystic mesothelioma in several reports[4,1].

Cystic mesotheliomas have nonspecific symptomatology. It is usually detected as an incidental finding in females of less than 40 years. Katsube et al[5] described the median age of diagnosis as 37.6 years, 67% cases occurring under 40 years of age. Physical examination revealed abdominal distension, abdominal tenderness or a palpable mass[9]. In majority of cases, the most frequent complaint was abdominal mass and abdominal pain. Laproscopy remains the best diagnostic tool because it enables to perform biopsies and to establish the definitive diagnosis[10]. Due to the rarity of this tumor, similarity of patient presentation, and comparable features on imaging, the diagnosis of this pathology is difficult, and is based on histological findings. The prognosis for patients with this tumor is excellent, though has a potential for recurrence but without any fatal outcome. Cystic mesothelioma are now a day's termed as multicystic peritoneal inclusion cyst on the basis of peritoneal reactive proliferation. The reason for recurrence is due to persistence of the original inciting factor. In our case the postoperative period was uneventful and there was no recurrence till date. However, this disease is characterized by high tendency to local recurrence. There is only one reported death from BCM in the literature by Raafat and Egan who reported a case of 14 years-old patient. The patient had a subtotal resection of the abdominal mass, and died 12 years after refusing surgery for recurrence[6]. Because of its unique clinical course, it is important for the pathologist to be aware of this entity and to diagnose it correctly. Indeed, BCM has a high local recurrence rate[7], and this recurrence rate is higher in women (40 – 50%) than in men (33%).[8] The mesothelial cells react immunohistochemically for keratin, calretinin; and negative for factor VIII- related antigen and other endothelial markers.

## CONCLUSION

Benign Cystic Mesothelioma is a rare tumor which may simulate a malignant lesion clinically. Exact histopathological diagnosis and awareness of this tumor will help in proper management of patient.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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