



## Primary Retroperitoneal Mucinous Cystadenoma-A Case Report

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### ABSTRACT

*Primary retroperitoneal mucinous cystadenomas (RMCs) are very rare and their biological behavior and histogenesis remain speculative. An accurate preoperative diagnosis of these tumors is difficult because no effective diagnostic measures have been established. We describe a 65-year-old woman with abdominal pain and a palpable mass. MRI of the abdomen revealed a retroperi-toneal cystic mass which was resected successfully at laparotomy. Histopathological examination of the resected mass confirmed the diagnosis of RMC.*

**KEYWORDS :** Retroperitoneal, mucinous cyst adenoma, Benign

### INTROUDCTION:

Retroperitoneal mucinous cystadenoma is extremely rare with an incidence of 1 in 1lakh population. Because of limited number of reported cases, its histogenesis and biological behaviour remain speculative. A plausible explanation is that it arises from the metaplasia of invaginated multipotential mesothelium.

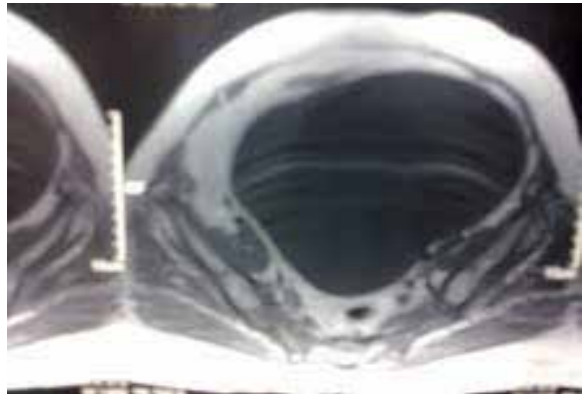
**CASE HISTORY:** A 65yr old female presented with abdominal discomfort and pain since 1 year. On per abdominal examination mass was noted and the patient was advised for **USG**.

**USG:** Showed a large cystic hypochoic mass ? ovarian cyst measuring 17x12x4cm and patient was taken for laparoscopy which in turn revealed that patient's both ovaries were normal.

**MRI SCAN:** Large well-circumscribed cystic tumour arising from the retroperitoneum with enhancing thin regular walls and appearing hypointense on T1-weighted images and hyperintense on T2-weighted images.

Laparotomy was done and the mass was sent for **HPR**.

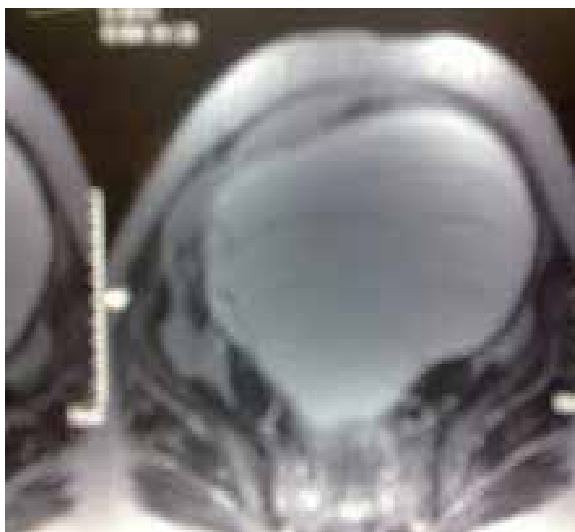
**Gross:** Single cystic mass measuring 18X13X5cm which drained mucinous fluid. Cut section showed a multiloculated cyst with thick septations on inner wall.



**MRI: hyperintense on T2-weighted images.**



**GROSS: cystic mass measuring 18X13X5cm**



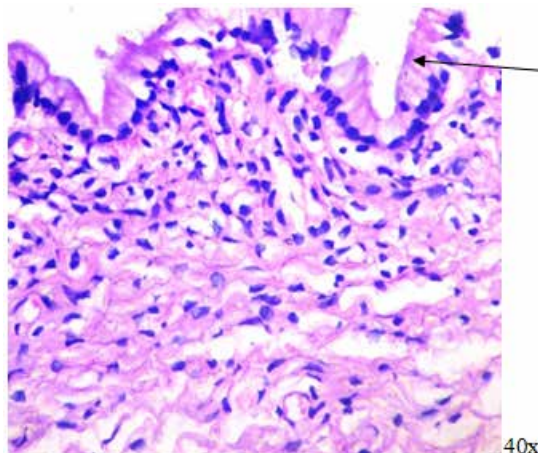
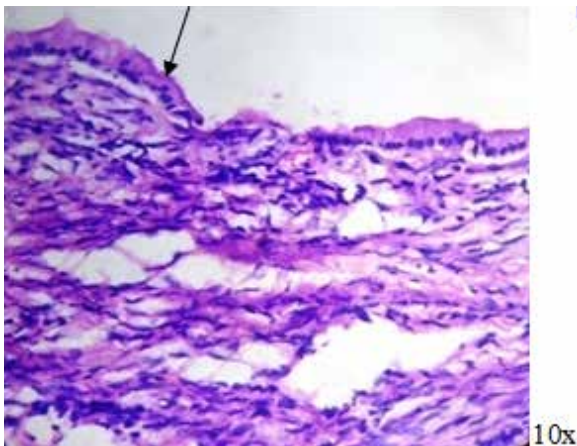
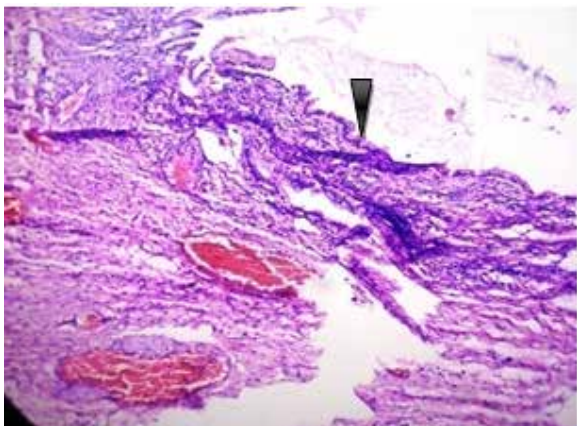
**MRI: hypointense on T1-weighted images**



**CUT SECTION:Multiloculated cyst with thick septations on inner wall.**

**Microscopy:** revealed cyst wall lined by single layer of tall columnar mucin secreting epithelium with underlying fibrocollagenous tissue.[arrow head,thin arrow]

A diagnosis of benign retroperitoneal cyst of Mullerian type was given.



**DISCUSSION**

Primary retroperitoneal mucinous tumors are rare.

This entity was first described by Handfield-Jones in 1924 in his study on retroperitoneal cysts [1]

The most common type of retroperitoneal mucinous tumors is the RMC, which shares a histological similarity to ovarian mucinous cystadenomas but can arise at any location in the retroperitoneum without attachment to the ovary

Both neoplasms are multiloculated cystic neoplasms, lined by a single layer of tall columnar cells with clear cytoplasm and a basal nucleus. The histochemical and ultrastructural features of both neoplasms are identical<sup>[2]</sup>

The histogenesis of primary RMCs remains unclear. Three main theories have been proposed to explain the histogenic origin of mucinous cystadenomas in the retroperitoneum. These tumors can arise from teratoma<sup>[4,5]</sup>, heterotopic ovarian tissue<sup>[3,4]</sup>, or mucinous metaplasia of the mesothelial lining cells<sup>[3,4]</sup>

Clinical signs and symptoms are non-specific including predominantly an abdominal mass, chronic abdominal pain or both. Radiologically, this entity presents a cystic formation repressing the organs around and there are a wide range of differential diagnoses including lymphangioma, cystic teratoma, lymphocele, urinoma and cystic mesothelioma [6].

Based on the review of cases reported in the literature, these neoplasms can be classified into 3 clinicopathologic types. The most common type is the retroperitoneal mucinous cystadenomas, which are benign cystic tumors characterized by a large unilocular or multilocular cyst. These tumors behave in a benign fashion and are associated with no recurrences following resection<sup>[7-10]</sup> In the second type, the lining epithelium contains foci of proliferative columnar epithelium in addition to the columnar epithelium. These tumors resemble the ovarian mucinous tumors of low malignant potential. The third type is the malignant mucinous cystadenocarcinoma. Areas of benign and mucinous tumors of low malignant potential may be seen in addition to the cystadenocarcinoma. These patients may have recurrent tumor or die from metastatic tumor.

**Conclusion:** As retroperitoneum is a large potential space. The cysts occurring here can grow to a considerable size before becoming symptomatic. Primary mucinous cystadenomas occurring at this site is extremely rare. Imaging is helpful to delineate the lesion and to provide valuable information for preoperative assessment and histopathology gives a definitive diagnosis.

This case is presented for its rarity.

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