Gigantic Retroperitoneal Mullerian Cyst – Case Report

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Abstract

Introduction and Objectives. Retroperitoneal mullerian cysts are very rare, usually asymptomatic and are considered to be a subtype of urogenital cysts. We present the clinical and pathological findings in a case of benign retroperitoneal cyst of mullerian type.

Materials and Methods. A 50 years old female presented in our department left side abdominal pain and a left side abdominal mass discovered on clinical examination. Physical examination detected a 20x15 cm left side abdominal mass. The CT scan showed a large cyst like structure, 163/160/138 mm in dimensions situated in the left abdominal flank, with its upper pole under the caudal pancreatic region, unilocular with homogenous fluid density. It appears to be separated from the left kidney.

Results. Surgery was performed – open laparotomy. We found a large cyst of 17/15 cm situated in the left retroperitoneum. Final histopathological exam described mullerian unilocular cyst, 17/17/13 cm in dimensions, with a thin firm wall, with serosal clear fluid, and the inner surface was without papillary projections.

Conclusions. Retroperitoneal mullerian cysts are rare diseases, with a long period of asymptomatic evolution

Key-words: cyst, mullerian, retroperitoneal

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Introduction and Objectives

Retroperitoneal cyst are rare entities and can be divided on anatomo-pathological basis in lymphatic cysts, mesothelial cysts, enteric cysts and urogenital cysts. Urogenital cyst can be divided on an embryological basis into pronephric, mesonephric, metanephric and Mullerian types [1].

Mullerian type retroperitoneal cyst is an extremely rare benign disease, that becomes symptomatic when its size compresses the adjacent structures. To our knowledge only a limited number of cases have been reported in literature.

We present the clinical and pathological findings in a case of benign retroperitoneal cyst of mullerian type.

Materials and Methods

We admitted in our department a 50 years old female with history of left side abdominal pain and a left side abdominal mass discovered on clinical examination. Her history was unremarkable with no urinary or gynecological antecedents.

Clinical examinations revealed a left-sided abdominal mass measuring 20x15 cm that was non-tender on palpation. Laboratory findings were within normal limits.

Ultrasound examination: transonic mass from the lower pole of the left kidney expanded to the left iliac fossa with normal left kidney. The abdominal CT scan described a large cyst like structure, 163/160/138 mm in dimensions situated in the left abdominal flank, with its upper pole under the caudal pancreatic region, unilocular with homogenous fluid density. It appears to be separated from the left kidney. The kidneys and ureters had a normal aspect. No other abnormalities were detected.

Results

We performed an open laparotomy finding a large cyst of 18/15 cm situated in the left retroperitoneum. The cyst had no attachment to any abdominal or pelvic organs. The cyst was mobilized and then removed in one piece.

Macroscopically the cyst was unilocular, 17/17/13 cm in dimensions, with a thin firm wall, with serosal clear fluid, and the inner surface was without papillary projections. The histological exam revealed an urogenital cyst of mullerian type.

Early post-operative recovery was uneventful, and 1 month and 3-month follow-up were normal.

Discussions

Retroperitoneal cyst of mullerian type usually occurs in obese women from 20 to 50 years of age who had received hormonal treatment [2].

The pathogenesis of these cysts is unknown. Retroperitoneal tissue may have an aberrant mullerian duct.
remnant, which might have a capacity for growth in the presence of abnormal hormonal stimuli [2]. Alternatively, the coelomic epithelium or peritoneum may undergo differentiation to become serous/tubal-type epithelium, losing its connection with the surface, producing a cystic structure. Some authors believe that ectopic endometriosis, as transplanted by retrograde menstruation or following pelvic surgical instrumentation, may give rise to retroperitoneal cysts [3].

The cysts may be asymptomatic, or may cause chronic abdominal complaints [4]. Hydronephrosis and hidroureter may appear secondary to ureteral obstruction, and a few cases presented malignant modifications [5].

There are no specific clinical features and the preoperative diagnosis is difficult. The role of CT and ultrasound is to demonstrate a cyst-like structure and the organ from which it originates. The definitive diagnosis is established with a histological examination.

The optimal procedure is complete cystectomy with minimal disturbance of the adjacent structures. Other treatments may include internal drainage, or simple aspirations, and should not be recommended because of high morbidity rates and risk of recurrence [6]. If bowel wall is adherent to the cyst, there can be an involvement of the mesenteric vessels and it may require a segmental bowel resection.

Conclusions

Retroperitoneal mullerian cysts are rare diseases, with a long period of asymptomatic evolution. Correct diagnosis and complete cystectomy will prevent any further complications [7].

References