Letter to the Editor

Mucocele of the appendix due to mucinous cystadenoma

Madam, appendiceal mucocele is an obstructive dilation of the appendix by intraluminal accumulation of mucoid material. Mucocele is an uncommon pathology encountered at a rate of 0.2% to 0.3% of all appendix specimens. Early diagnosis and prompt surgical intervention are mandatory to prevent perforation and spillage of the mucinous material into the peritoneal cavity causing pseudomyxoma peritonei.

A 42-year-old female patient presented to our emergency department with right lower quadrant abdominal pain. Physical examination revealed a tender mass in the right lower quadrant without signs of peritonitis. WBC count was 12300/ml, and the other blood chemistry tests were normal. A transabdominal ultrasound examination showed a plesntone appendicitis with free fluid in the region of the caecum. CT scan demonstrated a 6x4 cm heterogenous cystic mass in the right lower abdominal quadrant, which suggested tubaovarian abscess or plesntone appendicitis. The patient underwent exploratory laparatomy. A firm, well-encapsulated tumour was discovered at the radix of the appendix. It was mobilized from adjacent structures and removed intact (Figure). Histologically diagnosis was mucinous cystadenoma.

Although widely used, the term mucocele is inherently imprecise and inclusive of both benign and malignant lesions. It may be caused by one of four processes: retention cyst, mucosal hyperplasia, mucinous cystadenoma, or mucinous cystadenocarcinoma. Mucocele cystadenoma is defined as the dilated, mucous filled appendix containing hyperplastic adenomatous mucosa, with mucinous cystadenocarcinoma being present in majority of cases. In our case, mucocele caused by mucinous cystadenoma was detected.

Clinical manifestations of appendiceal mucoceles are nonspecific and one-quarter of them are asymptomatic. Presence of symptoms such as abdominal pain, abdominal mass, weight loss, nausea and vomiting, are associated with higher incidence of cystadenocarcinoma.

The initial diagnostic modalities include ultrasound, barium enema, colonoscopy and CT scan. Diagnosis of mucocele is often confirmed by an abdominal CT scan, which is characterized by a well-encapsulated cystic mass 2 to 20 cm in diameter. In our case, CT scan demonstrated 6x4cm cystic mass, which could not be correctly diagnosed as mucocele, because plesntone appendicitis or tubaovarian abscess could not be excluded.

All mucoceles should be removed to eliminate the chance of progression to malignancy. Appropriate therapeutic strategies are necessary to prevent perforation and spillage of the mucinous material into the peritoneal cavity causing pseudomyxoma peritonei. The type of surgical treatment is related to the dimensions and histology of the mucocele. In this case, the mucocele was removed intact without perforation and as the histological diagnosis was mucinous cystadenoma, no further treatment was required.

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References