CASE REPORT

Mucocele of Appendix Secondary to Mucinous Cystadenoma
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ABSTRACT

Mucocele of appendix is a rare disorder characterised by obstructive dilatation of the appendicular lumen by mucinous secretions. More commonly it is caused by mucinous cystadenoma and rarely by mucinous cystadenocarcinoma. Patients are often asymptomatic and may sometimes present with acute appendicitis. It is known to be associated with pseudomyxoma peritonei as a result of rupture of mucocele. A pre-operative diagnosis is necessary to plan careful resection. Ultrasonography and computed tomography are useful tools for the diagnosis of appendiceal mucocele. We report a case of appendiceal mucocele due to mucinous cystadenoma with surgical and histopathological confirmation.

Key Words: Appendix. Mucocele. Pseudomyxoma peritonei. Mucinous cystadenoma.

INTRODUCTION

Appendiceal mucocele is a rare lesion which denotes distension of the appendiceal lumen with mucus. The incidence is 0.29 - 0.4% of all appendectomied specimens.1 It may be due to a benign or malignant process. Mucinous cystadenoma and cystadenocarcinoma account for about 60 - 70% of all mucoceles. Other causes are retention cyst, mucosal hyperplasia, carcinoid, appendicolith, endometriosis, adhesions and volvulus. The clinical presentation is usually non-specific with 50% of cases being an incidental finding at surgery. Symptoms could be an indeterminate abdominal pain or chronic or intermittent abdominal colicky pain. Pre-operative diagnosis of mucocele of appendix is essential for the best choice of surgical approach to prevent peritoneal dissemination and perform the appropriate surgery.

CASE REPORT

A 55 years old male presented with history of right sided abdominal pain, intermittent, dull with associated history of nausea. There was no associated history of fever or altered bowel habits. On examination, his abdomen was soft, with a mass palpable in the right iliac fossa which was smooth, firm, mildly tender and freely mobile. Ultrasound of the abdomen showed a heterogenous lesion in right iliac fossa. CT scan of abdomen gave suspicion of appendicular mucocele to the mass (Figure 1).

Lower midline laparotomy was performed and a cystic mass was found in right iliac fossa (Figure 2). The appendix was globularly enlarged and outer surface was smooth. Limited ileocecal resection was performed due to adherence of mucocele to the cecum and cystic mass was removed unruptured. Postoperatively, patient showed uneventful recovery. Histopathology showed it to be a mucinous cystadenoma.

Figure 1: ST scan showing probable appendiceal mucocele.

Figure 2: Cystic mass in the right iliac fossa.
DISCUSSION

Mucocele of the appendix is a rare entity, with an incidence of 0.29 - 0.4% of all appendectomy specimens.1 Appendiceal mucocele is more common in females with male to female ratio of 4:1. The average age at the time of diagnosis is 54 years for benign mucoceles and 64 years for malignant disease.2 Appendiceal mucocele can occur secondary to mucinous cystadenoma (63%), mucosal hyperplasia (25%), mucinous cystadenocarcinoma (11%) and retention cyst.3 Approximately 23 - 50% of patients are asymptomatic, with the lesions being discovered incidentally during surgery, endoscopic procedures or radiological evaluations.4 The most common presentation of symptomatic appendiceal mucocele is acute or chronic right lower quadrant abdominal pain, as occurred in case of our patient.5 An intra-abdominal mass is palpable in half of cases.6 Nausea and vomiting, as well as altered bowel habits may also occur.7 USG, CT and colonoscopic examinations can facilitate pre-operative diagnosis of appendiceal mucocele.8 In this case, CT scan of abdomen provided a pre-operative suspicion of appendiceal mucocele.

Surgical excision of mucocele of appendix can be either by laparotomy or laparoscopy. Careful handling of the specimen is required as spillage of the contents can lead to pseudomyxoma peritonei. Involvement of the caecum or adjacent organs is an indication for right hemicolectomy and thorough exploration of ovaries and gastrointestinal tract.9 Complications of appendiceal mucocele include intestinal obstruction, intussusception, intestinal bleeding, fistula formation, and volvulus. The worst complication is pseudomyxoma peritonei, characterized by peritoneal dissemination caused by iatrogenic or spontaneous rupture of the mucocele.10

In conclusion, appendiceal mucocele is a rare disease and should be kept in mind in differential diagnosis of patients presenting with mass right iliac fossa. Surgical excision without perforation of specimen is the treatment of choice in cases of benign pathology.

REFERENCES


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