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Retroperitoneal Mucocele of the Appendix: Diagnostic Problem (A Case Report)

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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Case Report

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ABSTRACT

Appendicular mucocele is a rare pathological entity, of variable clinical presentation, often identified incidentally on imaging or during surgical exploration for an unrelated diagnosis. The diagnosis of certainty is mainly anatomo-pathological. We report the case of a 49 year old female patient with no previous surgical history in whom we discovered this condition in an incidental manner. The clinical presentation was that of an acute appendicular syndrome and revealed a mass in the right iliac fossa. The patient underwent a right hemicolectomy with ileocolic anastomosis and the anatomopathological study confirmed mucinous adenocarcinoma. The postoperative course was simple.

Keywords: The Appendicular mucocele; Appendiceal mucinous adenocarcinoma; surgery.

1. INTRODUCTION

Appendiceal Mucocele is a rare disease that represents only 0.25% of appendectomy specimens. It is characterized by a progressive appendix dilation due to intraluminal accumulation of mucoid substance and it might be malignant or benign [1]. The clinical picture of this disease is unusual. Appendiceal Mucocele is asymptomatic in 25 to 30% of cases and it manifests by a chronic pain in the right iliac fossa in 70 to 75% of cases. The diagnosis is usually

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incidental and often is discovered during a radiological or endoscopic examination or during an operation for acute appendicitis [2]. Treatment is usually surgical and it is determined by the integrity of the organ, the size of the base and the histological type of the lesion.

We report a case treated in the Department of Surgery in order to show the diagnostic difficulties of this condition in our practice.

2. CASE REPORT

A 67-year-old woman comes to the ER with a sharp, progressive pain in the right iliac fossa that has been going on for 15 days and has not been eased by analgesics. Pain linked with nausea, vomiting, and constipation led the patient to demonstrate an alteration in the general state. The patient was febrile, but her vital signs were normal. Laboratory results shows a decrease of hemoglobin count 9.8 g/dL and hyperleukocytosis of 13,670/mm. A 7-cm-diameter mass in the right iliac fossa spreading to the right flank, painful and fixed, was discovered during a clinical examination of the abdomen and during palpitation, the mass was firm and hard. An empty rectal ampulla was found during a rectal examination. A Ct scan with was performed with contrast media shows cecum lesion had a polylobed shape of 75x67mm on the abdominal, with agglutination of small intestine and small infiltrated nodule around it, as well as thickening of the right iliac muscle with a roughly rounded right formation [Fig. 1]. The appendix was not visible, resulting in an abscess of the right iliac muscle on the cecum's tumoral process. An emergency operation was performed on the patient. Surgical exploration revealed a burst retrocaecal appendix with mucus discharge in the retroperitoneal area, as well as a 4 cm thickening of the cecum's posterior side, which was non-stenosing and had an abscessed collection [Fig. 2, Fig. 3]. A right ileo-hemicolectomy was done, With an ileo-colic anastomosis. A mucinous adenocarcinoma of the appendix was discovered in the surgical material, which had permeated the whole cecal wall and reached the peritoneum. At surgery there was no spillage in peritoneal cavity and no palpable lymphadenopathy. The patient was discharged and seen in outpatient clinic 15 days later, no side effect, no pain, no discharge or infected area around. The patient was assured, and no further examination was planned.

3. DISCUSSION

Appendix mucinous neoplasms are an uncommon and poorly understood heterogeneous condition that affects less than 0.3 percent of appendectomies [3]. Particularly, appendiceal mucinous adenocarcinomas are uncommon, with only 0.2 percent of appendectomies showing mucinous tumors [3]. According to our observations, they are four times more common in women than in males, with an average age of 50 to 60 years [4]. Peritoneal pseudomyxoma is a malignant peritoneal tumor characterized by an effusion of varying size, viscous or mucinous appearance, in the peritoneal cavity. Mucinous appendiceal neoplasms and mucinous adenocarcinomas are the most common causes.

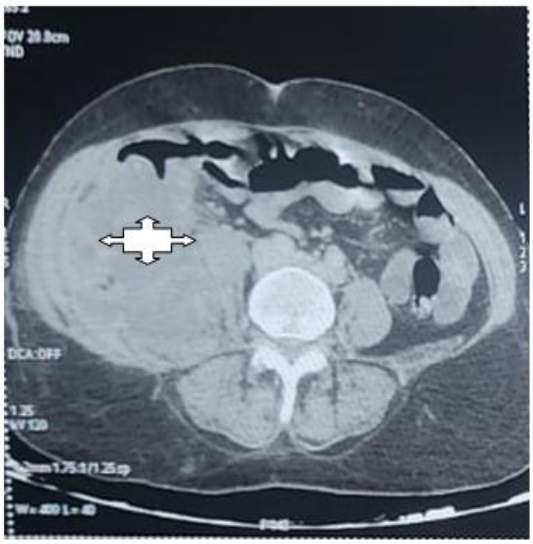

Fig. 1. CT appearance of moral process of cecum

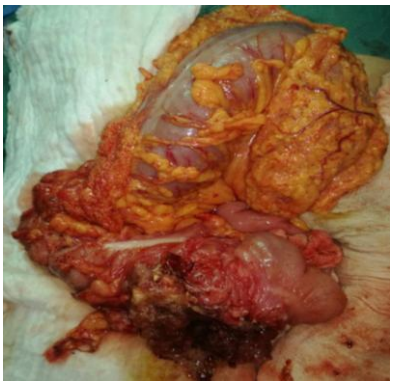

Fig. 2. Tumor mass of Cecum

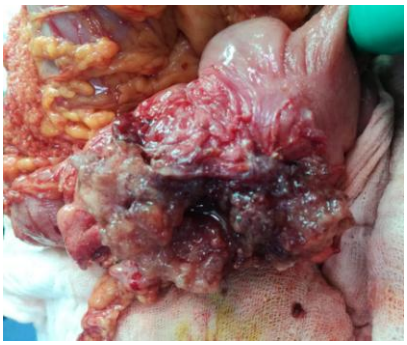

Fig. 3. Intraoperative image of the cecal tumor mass

The symptoms aren't very specific clinically. Acute stomach discomfort (which might mimic acute appendicitis) or chronic abdominal pain, abdominal mass, or weight loss are all possibilities. As a result, a clinical examination alone is insufficient to confirm a diagnosis of appendiceal mucinous neoplasm [5]. In half of the cases, mucinous tumors of the appendix appear on an abdominal scan with signs of appendicitis or as a well-encapsulated cystic mass with mural calcification [6].

The treatment is surgical, the interest of which is to respect the carcinogenic criteria of resection in order to avoid perforation of the tumor. The treatment of appendicular tumors for many years has been appendectomy (for tumors less than 2 cm) and right hemicolectomy (for tumors greater than 2 cm), although in situations where total resection of the primary tumor cannot be achieved by simple or radical appendectomy, where tumor lymph node involvement is found, right hemicolectomy is recommended as the standard procedure [7]. Mucinous adenocarcinomas are frequently greater than 4 cm in diameter and, in 50% of cases, metastatic to the peritoneum [8].

As a result, whether the tumor has progressed, the degree of malignancy, and the existence of a peritoneal pseudomyxoma all have a role in the prognosis of appendix mucinous adenocarcinoma [9]. The formation of peritoneal pseudomyxoma and physical indications of likely infiltration surrounding the abdominal organs imply a poor prognosis [10]. If the patient has limited clinical symptoms and no evidence of infiltration or dissemination of surrounding tissue, complete removal of the appendix tissue can considerably extend the life span [11].

4. CONCLUSION

The retroperitoneal appendix mucocele is a somewhat uncommon condition. When an atypical appendicular syndrome or a right iliac fossa tumor is present, they should be considered. Before surgery, it's crucial to have an accurate radiological preoperative diagnosis based on a CT scan to avoid major intraoperative and postoperative problems that might affect the patient's prognosis.

CONSENT AND ETHICAL APPROVAL

Patient’s written consent has been collected and a written ethical approval has been collected and preserved.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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