



INCIDENTAL PRESENTATION OF MUCINOUS NEOPLASM OF APPENDIX PRESENTING AS APPENDICITIS

General Surgery

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ABSTRACT

Appendiceal mucinous neoplasms are a rare and heterogenous disease for which clinical management is challenging. We present the case of 30 year old male who came with complaint of pain in the right lower abdomen for 1 week. Diagnosis was confirmed and CT abdomen revealed thickened appendix showing maximum diameter of 8mm and was diagnosed to have subacute appendicitis. Laproscopic appendicectomy under G.A. was done and the specimen was sent for HPE. No severe complication occurred after surgery. Biopsy report showed features consistent with low grade mucinous neoplasm of appendix.

KEYWORDS

Appendix Carcinoma, Abdominal Surgery, Review.

INTRODUCTION:

Appendiceal mucinous neoplasms are very uncommon malignancies that account for less than 1% of all cancers. Mucinous neoplasms are a diverse collection of illnesses with varied malignant potential, as shown by several classification systems. Early stage AMNs are generally discovered by chance during a resection for appendicitis. Advanced stage illness manifests as abdominal distension due to mucus deposition in the peritoneal cavity.

Case Report:

A case of mucinous neoplasm of appendix presenting as appendicitis. A 30 year old male came with complaints of right lower abdomen pain for 1 week which was insidious in onset, progressive in nature, colicky type and non radiating. History of one episode of non-projectile vomiting with contents as food particles. No history of fever and bowel disturbances. No known comorbidities. On examination of abdomen, after getting patient consent. All inspectory findings were normal. On palpation abdomen was soft, right iliac fossa tenderness present, rebound tenderness present, no guarding or rigidity, hernial orifices felt. Bowel sounds heard. Patient was clinically assessed to have appendicitis.

CT abdomen revealed thickened appendix showing maximum diameter 8mm. No surrounding fat stranding/ fluid collection. After obtaining informed and written consent from the patient, he was taken up for laproscopic appendicectomy under G.A..

Intra Operative Findings:

Under ASP and G.A. Standard laparoscopic port placement done pneumoperitoneum created, appendix was visualised and found to be unflawed and oedematous. Appendix dissected, adhesions released. Base ligated with 2-0 endloop. Appendix was removed and specimen sent for HPE.

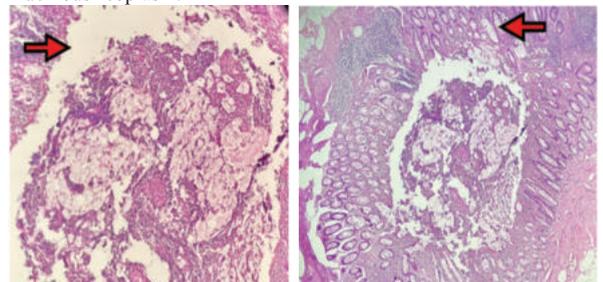


Post operatively the patient had an uneventful recovery and was discharged on post op day 3.

RESULT:

Section studied from appendix shows mucosa and its lumen comprising of proliferating mucinous epithelial cells. The cells shows abundant apical mucin with elongated nuclei and low grade dysplasia.

The mucin pools in the lumen of appendix is seen extending up to the lamina propria. Features consistent with low grade appendiceal mucinous neoplasm.



DISCUSSION:

Appendiceal mucinous lesions are often discovered incidentally during radiologic or endoscopic evaluation for unrelated complaints such as abdominal pain. If an appendiceal mucinous lesion is confined to the appendix, we perform appendectomy for definitive pathologic diagnosis^[1]. Unfortunately, many patients with appendiceal mucinous lesions present with peritoneal dissemination, in which case the diagnosis is usually established by percutaneous biopsy of one of the peritoneal lesions. The differential diagnosis of a radiographic appendiceal mucocele includes appendicitis, nonmucinous appendiceal neoplasms (eg, leiomyoma, fibroma, neuroma, neuroendocrine tumor, lipoma, nonmucinous adenocarcinoma of the appendix)^{[2][3]}. These often can be differentiated from an appendiceal mucinous lesion by their appearance on abdominal CT scan. LAMN is the term of consensus to describe a true neoplasm with dysplastic epithelium that produces abundant mucin and characteristically exhibits expansile growth with a "pushing" border, which may or may not cause loss of the muscular components of the wall and mural fibrosis. LAMNs always lack overt infiltrative epithelial invasion of the appendiceal wall and are confined by the muscularis propria. Mucin dissection through the appendiceal wall may be seen, but the mucin pools are acellular. The low-grade epithelial dysplasia of LAMN is characterized by mildly enlarged hyperchromatic nuclei with minimal mitotic activity. Although by definition LAMNs do not invade, their expansile growth may push and thin the appendiceal wall until the appendix ruptures, and the resultant spillage and the resultant spillage of cellular or acellular mucin may lead to pseudomyxoma peritonei (PMP)^[4].

Treatment:

For both diagnostic and therapeutic objectives, we advocate surgical resection of all localised appendiceal mucinous lesions. If the lesion is malignant, surgical excision will also avoid future rupture, which could result in pseudomyxoma peritonei. Localized illness - We do a routine appendectomy for most localised appendiceal mucinous lesions. Patients who have a LAMN or HAMN that is contained to the

appendix, has not ruptured, and has been entirely removed by appendectomy do not need a right hemicolectomy. The treatment of a microscopically positive margin after appendectomy for an unruptured LAMN is debatable, with some guidelines supporting re-excision via cecectomy or ileocecectomy and others advising against a complete right colectomy.

CONCLUSION:

The clinical history and prognosis of appendiceal mucinous lesions are strongly linked to histology as well as the existence and amount of peritoneal dissemination.

Simple retention cysts (mucoceles) and serrated polyps are benign lesions; survival following conventional appendectomy is high (91 to 100 percent). With full resection, neoplastic lesions such as low-grade appendiceal mucinous neoplasms (LAMNs) and high-grade appendiceal mucinous neoplasms (HAMNs) have a favourable prognosis, however mucinous adenocarcinomas have a more guarded prognosis depending on histologic grade and stage.

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