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CASE REPORT

Malignant Psoas Abscess or Pseudomyxoma Extraperitonei

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ABSTRACT

Primary adenocarcinoma of appendix is an uncommon gastrointestinal malignancy. Similarly, Psoas abscess is an entity, which sometimes requires extensive work-up to reach a diagnosis. Combined presentation of these two rare conditions is not only exceptional, but also diagnostically challenging. We present a case of a lady who presented with recurrent UTI secondary to right sided ureteric obstruction, referred right hip joint pain resulting from a Psoas abscess, which eventually turned out to be a consequence of metastatic adenocarcinoma of appendix, causing pseudomyxoma extraperitonei, with simultaneous intraperitoneal deposits.

Key words: *Adenocarcinoma of appendix. Psoas abscess. Pseudomyxoma extraperitonei.*

INTRODUCTION

Adenocarcinoma of appendix is a rare entity, which is hardly suspected pre-operatively in patients undergoing appendectomy.[1] Most often appendiceal neoplasms mimic acute appendicitis and the diagnosis is made postoperatively.[2] Similarly, correct identification of retroperitoneal diseases e.g. Psoas abscess could become very difficult because of its rarity, ambiguity of symptoms as well as the absence of specific clinical signs.[3] The clinical presentation of Psoas abscess may be indicative of secondary involvement of adjacent structures rather than the primary disease. When both of these conditions are simultaneously present and are also interrelated, the diagnosis becomes extremely difficult and may result in unwanted delays and extensive work-up.

This unusual case presentation reflects the challenges in the diagnosis and management of metastatic adenocarcinoma of appendix.

CASE REPORT

A previously healthy 55 years old lady presented with off and on right-sided flank pain and was found to have urinary tract infection (UTI) for which she received appropriate treatment with antibiotics. Few months later her symptoms recurred. On investigations she demonstrated iron deficiency anaemia, but no other significant abnormality was detected. Further work-up for iron deficiency anaemia, including fecal occult blood and carcinoembryonic antigen (CEA) was carried out but both of them were within normal range. She was again treated symptomatically.

After a few months, she developed lower abdominal pain in addition to flank pain which was now radiating to her right hip joint. An Orthopaedic's opinion was sought, where it was discovered on MRI that she had a 5x7 cm Psoas abscess without spinal involvement. CT guided drainage of abscess was attempted which was unsuccessful, because of the presence of thick material. Cultures including AFB were negative and histopathology was inconclusive, showing only inflammatory cells. She had been started empirically on anti-tuberculous therapy.

Continuous search of the cause of her symptoms led to contrast enhanced CT scan of whole abdomen which redemonstrated right-sided Psoas collection of almost the same size, significant hydronephrosis, and thick-walled terminal ileum (Figure 1). Right-sided percutaneous nephrostomy (PCN) was done and she was referred to general surgery service for open drainage. On drainage of Psoas abscess only gelatinous material without pus was found which was sent for histopathology.

Meanwhile, a colonoscopy was planned due to thickening of distal ileal loops, which demonstrated a non-obstructing mass in cecum. She was planned for a right hemicolectomy with the diagnosis of a possible cecal neoplasm. An exploratory laparotomy revealed a firm gritty appendiceal lesion invading the Psoas muscle and encircling the right ureter. There were metastatic deposits in the omentum and the right ovary; however the rest of the peritoneal cavity was free of tumour. A right hemicolectomy, oophorectomy and omentectomy with side-to-side ileotransverse anastomosis were done. Histopathology revealed metastatic adenocarcinoma of appendix with involvement of ovary and omentum.

After detailed discussion with the patient about extent and prognosis of the disease, as well as treatment

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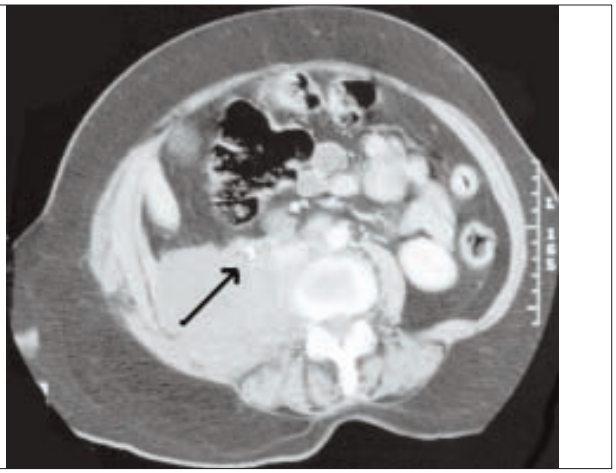

Figure 1: CT section showing psuedomyxoma extraperitonei (arrow pointing towards ureteric stent).

options, she declined further therapy and opted for symptomatic treatment of back pain only. Following 9 months of symptomatic treatment, in which she also received traditional non-pharmacological therapy, she succumbed to the disease process.

DISCUSSION

Primary malignancies of appendix are rare gastrointestinal neoplasms; adenocarcinoma of appendix comprises of only 17% of all appendiceal tumours.[4-6] The most common presentation of these neoplasms is acute appendicitis in almost 37% of cases.[2,4] Patients with epithelial neoplasms can be presented with pseudomyxoma peritonei (PMP), which literally means, a false mucinous tumour of the peritoneum. This widespread mucinous deposition is a result of mucus production by the tumour cells. This results in perforation of the appendix and release of mucus producing tumour cells into the peritoneal cavity. Mucinous epithelial tumours have a high incidence of PMP, which may reach up to 20% if the tumour is invasive.[1]

Many unusual manifestations of adenocarcinoma of appendix are described in literature,[2,3,6-8] but there are isolated reports of appendiceal mass causing urinary tract obstruction or invading the retroperitoneal space and forming enterocutaneous fistula.[2,3,6] This report is yet another unusual presentation of appendiceal adocarcinoma.

Ahmed *et al*. suggest that diagnostic approach for suspected bowel tumours causing urologic involvement should include early CT scanning followed by colonoscopy and early urologic opinion.[2] Per-operative assessment of metastatic spread could be used as a guide for a curative vs. palliative surgical treatment.[2] While the appendectomy alone could be justified in well localized tumours of favourable histology,[9] right hemicolectomy offers better prognosis than appendectomy alone.[4]

Even widespread peritoneal involvement could be aggressively controlled by means of peritonectomy or hyperthermic intraoperative intraperitoneal chemotherapy in selective cases.[10] In this case, a particular difficulty was posed by the fact that the appendix had ruptured into the retroperitoneal space and formed a mucinous collection in the Psoas muscle. The gritty firm mass could not be completely removed from the underlying muscle, and only peritoneal clearance could be achieved by right hemicolectomy, oophorectomy and omentectomy.

Studies suggest that for localized disease the outlook is good and survival up to 4 years has been reported.[5] However, in patients with disseminated disease, the outlook is dismal even with extensive peritonectomy. In case of pseudomyxoma extraperitonei as in this particular event, there is no definite way of achieving palliation, although radiotherapy might be able to control local symptoms and spread of disease.[6]

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