LEIOMYOMA OF THE CAECUM PRESENTING AS PERITONITIS

*PETER MACK FRCS Ed, FRCS Glasg **RAJ MOHAN NAMBIAR FRCS, FRCSEd, FRACS

*Tan Tock Seng Hospital

**Department of Surgery B, Singapore General Hospital

SUMMARY

Leiomyoma of the caecum is a very rare condition. A case of a giant leiomyoma of the caecum presenting peritonitis is described. Difficulty with preoperative diagnosis, the unusually large size, the central necrosis complicated by abscess formation were the problems encountered in this case.

Keywords: leiomyoma, caecum, peritonitis

INTRODUCTION

Leiomyoma of the caecum is a rare tumour. While leiomyomata are known to arise from any part of the large bowel, caecum is a rare site. The largest series to date is that of Mackenzie¹ who reviewed 37 cases of myomatous tumours of the colon, two of which were complicated by perforation. More recently, Swerdlow² reported another case of a perforated caecal leiomyoma. We now report a patient who was operated at the stage of abscess formation without perforation.

CASE REPORT

A 63 year old Chinese man was admitted on May 21, 1981 with symptoms of difficulty of micturiction for four days associated with fever, malaise and anorexia of ten days duration. Direct questioning revealed previous symptoms of prostatism with hesitancy, poor stream and terminal dribbling. Initial examination showed the patient to be in fair condition with a temperature of 38°C and a blood pressure of 150/90 mm Hg. The abdomen was distended and this was thought to be due to a distended bladder. A urinary catheter was inserted and 550 ml of concentrated urine was drained. Clinical re-examination after the catheter insertion however, revealed no decrease in the degree of abdominal distention. A blood count showed a haemoglobin of 11.4 g%, a leucocyte count of 20,000 per cubic millimitre with 97% polymorphs. Urine microscopy showed 60–70 white cells per high power field. An urgent abdominal radiograph taken showed multiple air-fluid levels in the erect film. The patient remained febrile and the abdominal distention continued despite nasogastric suction. Localised tenderness over the right lower quadrant became increasingly marked. The bowel sounds were absent and rebound tenderness was subsequently elicited. A clinical picture of peritonitis was immiment and exploratory laparotomy was undertaken. Through a right paramedian incision, a huge cystic mass was found arising from the caecum.

It was egg shaped measuring $20 \times 16 \times 16$ cm in size and contained foul smelling liquid. The mass appeared to have arisen from the medial aspect of the caecum in the region of the appendix and had apparently eroded its way through the mesentery. It had a very well defined capsule blood vessels running over it. The tumour was resected en masse with the caecum which was unhealthy in appeareance. An end-to-end anastomosis was performed between the terminal ileum and the ascending colon. The specimen removed weighed 1050 gm. The wall contained fibroadipose tissue with necrotic material. Histological studies showed this to be a tumour that has undergone extensive necrosis. Scattered within the tumour were surviving bundles of smooth muscle fibres. Areas of hyaline degeneration with fatty infiltration were seen. The histological diagnosis was that of a leiomyoma. In retrospect, close scrutiny of the plain supine abdominal radiograph (Fig 1) did suggest the presence of a soft tissue mass in the right lower abdomen. The fluid level at the right lower quadrant was the result of liquefaction of the necrotic centre of the myoma (Fig 2). Patient had an uneventful recovery.



Figure 1: Supine AXR. Vague soft tlssue shadow discernible at the right lower quadrant of abdomen.

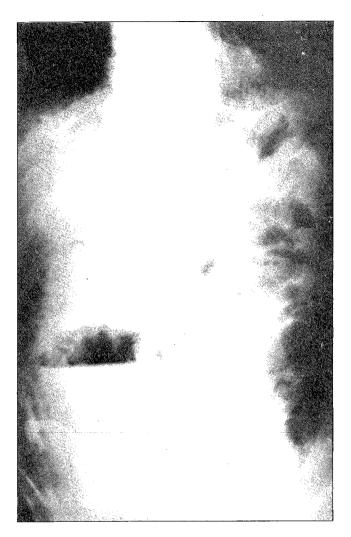


Figure 2: Erect AXR. A large gas-fluid shadow present in the region of the caecum. Wall appears thick and craggy consistent with a walled off abscess.

DISCUSSION

Opinions differ as to the origin of the leiomyoma of the colon. Whether they arise from the muscle coat, the muscularis mucosae or the arteries of the bowel wall remain uncertain. What we do know is that a caecal leiomyoma usually begins as an intramural tumour. In its most common form it grows endocaecally into the lumen of the bowel, so-called "submucous", where it can cause a variety of complications. It may ulcerate and bleed or it may obstruct the lumen and perhaps even initiate an intussusception. In this patient the tumour had grown exocaecally as a "subserosal" tumour and to an unusually large size. It had already outgrown its blood supply leading to central necrosis with superadded infection. Urinary retention was expected considering the vicinity of the lesion to the bladder. With mounting infection, signs of peritonitis developed and the patient was fortunately explored before the abscess perforated.

REFERENCES

¹ Mackenzie DA, McDonald JR, Waugh JM. Leiomyoma and leiomyosarcoma of the colon. Ann Surg 1954; 139:67–75.

² Swerdlow DB, Pecora C, Gradone F. Leiomyoma of the Cecum presenting as an acute surgical abdomen: report of a case. Dis. Col & Rect. 1975; 18:438–439.