Abdominal wall abscess – an unusual primary presentation of a transverse colonic carcinoma

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Summary: Carcinoma of the transverse colon presenting as an abscess of the anterior abdominal wall is a rare occurrence. Such a case is presented, where all investigations failed to show the nature of the lesion. The literature has been reviewed and the pathology that characterizes such lesions, and their management in the light of their favourable prognosis, is discussed. Occult colonic carcinoma should be considered in the differential diagnosis of such abscesses.

Introduction

Perforative colonic carcinomas very rarely present as subcutaneous thigh abscess,¹ retroperitoneal abscess,² abdominal wall abscess^{3,4} and subcutaneous emphysema.⁵ The incidence of perforation in previous large series in 2.6–7.8%^{6–8}. This includes cases of free perforation into the peritoneal cavity and those where the tumour had perforated locally resulting in abscess or fistula formation.

An unusual presentation of a carcinoma of the transverse colon is described. The case presented represents adherence of the tumour to the anterior abdominal wall leading to bacterial faecal contamination and abscess formation. This case illustrates the obscure presentations of colonic cancers and difficulties in their diagnosis.

Case report

In November 1991, a 75 year old insulin-dependent diabetic woman presented with a 3-week history of a tender swelling of the anterior abdominal wall. This had gradually increased in size and was causing her considerable discomfort. There was no history of alteration of bowel habit. On examination she was obese, and was pyrexial with a temperature of 38°C. There was a large tender swelling just to the right of the umbilicus. Her haemoglobin was 10.4 g/dl and her white cell count

16.1 × 10⁹/l. The abscess was drained under general anaesthesia releasing foul-smelling pus, which subsequently grew enterococcus and coliform organisms. She was treated with intravenous benzylpenicillin, flucloxacillin and metronidazole. Over the next few months the cavity showed signs of healing until February 1992, when she presented with another collection. There was considerable induration of the anterior abdominal wall, and the possibility of a deep-seated collection was raised. A computed tomographic (CT) scan was performed (Figure 1), demonstrating air and soft tissue thickening within the fat of the right side of the anterior abdominal wall where small and large bowel loops were found to be adherent to the under surface. The liver was normal and there was no intra-abdominal mass seen on the scan. A sinogram was performed in an attempt to determine a possible deeper communication. This outlined a blind tract measuring about 3 cm. As this was inconclusive, an air contrast barium enema was then carried out in an attempt to delineate any possible large bowel pathology. This showed extensive diverticula throughout the colon with the suggestion of a tract from a diverticulum in the sigmoid colon. The abscess burst spontaneously and settled with a further course of antibiotics. Culture of the pus grew similar organisms.

In March 1992 she presented for the third time with yet another collection. A definitive decision was made to perform an exploratory laparotomy. This revealed an enormous complex mass involving the transverse colon, small bowel and omentum stuck to the under surface of the anterior abdominal wall. The liver was normal and there was no sign of disease elsewhere in the peritoneal

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Figure 1 CT scan, showing air in soft tissues of the anterior abdominal wall.

cavity. Frozen section showed the presence of inflammatory debris and a number of foamy cells. There was no evidence of malignancy on this section. An extended right hemicolectomy was performed, with wide excision of all involved structures, and the sinus track was curetted. Postoperatively she did well and was discharged home on the 10th postoperative day.

Histology revealed a moderately well-differentiated Dukes B adenocarcinoma of the transverse colon. The carcinoma was adherent to the adjacent small bowel but did not penetrate the wall. Lymphocytes were not conspicuous. There were no extramural vessels involved and none of the lymph nodes removed contained metastatic deposits. Follow-up at 12 months showed no clinical evidence of recurrent disease, and the wound site remained well healed.

Discussion

The presentation of colorectal cancer can be quite varied and depends on the site of the lesion.⁹ Transverse colonic lesions frequently present with symptoms of pain, mass, anaemia or obstruction. Perforation due to a transverse colonic carcinoma can occur locally into the stomach,¹⁰ mesocolon, omentum or at the caecum as a result of diastatic perforation due to obstruction. The earliest report of a transverse colonic lesion involving the anterior abdominal wall was by Thurnam in 1848.¹¹

The fact that a colonic carcinoma can present as a subcutaneous abscess without bowel symptoms emphasizes the difficulty of early diagnosis of carcinoma of the gut. This is further highlighted by the failure of our investigations to show the tumour. None of the investigations revealed the

underlying bowel pathology. Shucksmith has suggested that a barium enema may not show a fistula entering at or proximal to the lesion as the constriction may not allow development of a sufficient pressure. Goodman *et al.*¹² have suggested that a CT scan is helpful in inflammatory diseases of the abdominal wall. CT scan is a useful investigation in detecting the presence of an abdominal wall infection, particularly in obese patients, and in our case showed the presence of gas in the anterior abdominal wall with loops of bowel adherent to the undersurface; however, it failed to demonstrate a fistula.

The only useful investigation in our case was culture of the pus as presence of coliform organisms and bacteroides was highly suggestive of bowel origin.^{4,13} Recurring episodes and the presence of enteric organisms prompted us into an exploratory laparotomy.

The pathology of this lesion was consistent with the findings of previous authors.^{3,13,14} It was a moderately well-differentiated tumour with acute inflammatory debris consisting of foamy macrophages. The carcinoma was attached to the adjacent small bowel serosa but did not penetrate the wall. No distinct fistulous tract could be identified, and none of the resected lymph nodes showed metastatic deposit.

These tumours are slow growing, well-differentiated lesions that attain a large size to infiltrate or perforate into adjacent viscera. Spratt *et al.*¹⁴ have likened these lesions to basal cell carcinomas, attaining a great size locally and invading adjacent organs without metastasizing.

The prognosis of colonic carcinoma is largely dependent on the presence or absence of involved nodes.¹⁵ When the tumour has perforated through the entire wall without nodal deposits (Type B2),

up to 50% 5-year survival has been reported.^{3,14} Thus involvement of the anterior abdominal wall does not necessarily mean that these lesions are

non-resectable. They are potentially curable lesions in spite of their size and wide excision of all involved structures is recommended where feasible.

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A case of Churg–Strauss vasculitis complicated by small bowel necrosis

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Summary: A case of Churg–Strauss syndrome causing mesenteric intestinal ischaemia and small bowel necrosis is described in a 29-year-old man. Despite conservative management, the patient's condition deteriorated and he underwent five laparotomies. Small and medium-sized arteries within the mesentery and lymph nodes showed necrotizing vasculitis. Currently he is doing well on oral nutrition and medical management.

Introduction

Acute intestinal ischaemia is a surgical emergency with life-threatening features. Mesenteric vasculitis is a rare cause of intestinal ischaemia accounting for 2% of cases.¹ Rheumatoid arthritis, scleroderma, systemic lupus erythematosus, giant cell arteritis, Wegener's granulomatosis and

Churg–Strauss syndrome are systemic diseases which may rarely cause intestinal ischaemia and infarction. We describe a patient with Churg–Strauss syndrome who survived after multiple resections for small bowel necrosis.

Case report

A 29-year-old man with a 5-year history of bronchial asthma and allergic rhinitis was admitted to

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