A rare presentation of caecal adenocarcinoma

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INTRODUCTION

This paper describes an unusual case of caecal adenocarcinoma which had perforated through to the anterior abdominal wall. Colocutaneous fistula is an uncommon complication of colonic cancer which is more typically associated with sepsis and ischaemia of the bowel, inflammatory bowel disease and trauma. On rare occasions, as in this case, the colocutaneous fistula may be the initial presenting complaint.

DISCUSSION

Much has been written about the classic presentation of colonic carcinoma, but relatively little has been documented about carcinoma of the right colon presenting as a fistula. Staniland et al (1976) reviewed the clinical presentation of diseases of the large bowel in 642 patients and gave the following analysis of presentation among 50 patients with carcinoma of the right colon: abdominal mass 90%, pain 80%, anorexia 50%, constipation 30%, diarrhoea 28%, and nausea and vomiting 30%.

Carcinomas of the colon can lead to internal or external fistula. However, the incidence of faecal fistula as a result of malignancy is not high. The incidence of colocutaneous fistula is even less common. Of 4797 cases of colon carcinoma treated at the Mayo Clinic, 2.4% had abdominal wall involvement of which spontaneous colocutaneous fistula was seen only occasionally (Merrill et al, 1950). Welch and Donaldson (1974) reported only two cases of colocutaneous fistula out of 118 patients with perforative colonic cancer.

Carcinoma of the colon is said to be perforating when malignant cells have penetrated the muscularis propria and invaded the visceral peritoneum (Merrill et al, 1950). This invasion can have a considerable inflammatory component. It is presumed that the colocutaneous fistula is preceded by a perforated colonic cancer with inflammatory adhesion to the abdominal wall and abscess formation. Abdominal wall abscesses secondary to colonic carcinoma have been described and the mortality rate is usually high from overwhelming sepsis (White et al, 1973).

Lesions which perforate onto the abdominal wall are more often located on the proximal portion of the colon as a result of the greater mobility of the caecum and the fact that carcinomas of the right side of the colon tend to attain larger proportions before detection. About 30% of lesions that perforate onto the abdominal wall are mucoid adenocarcinomas (colloid type) (Merrill et al,

Figure 1. Right flank lesion (colostomy bag over discharging sinus).

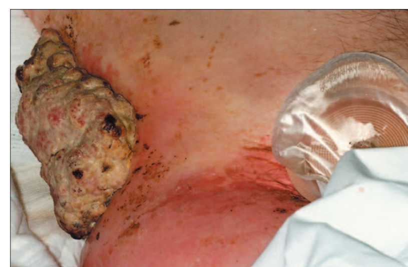
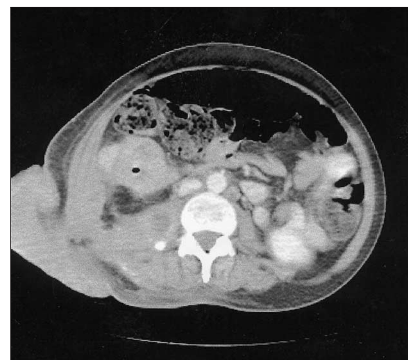


Figure 2. Computed tomogram of the abdomen showing communicating fistula between the external lesion and the caecal mass.



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CASE REPORT

A 53-year-old unkempt Caucasian gentleman presented to the accident and emergency department with a 1-year history of a slowly growing lesion on his right flank (*Figure 1*). He had chosen to ignore this lesion until his daughter had eventually persuaded him to seek medical attention. The external lesion measured approximately 25x20 cm and there was an associated mass palpable in the right iliac fossa. There was also a discharging sinus in his right groin region. He was septic with a temperature of 38°C, tachycardic at 140 beats per minute and a white blood cell count of 13×10^9/litre. He was also anaemic with a haemoglobin of 6.9 g/dl and a mean cell volume of 56.8 fl. His initial treatment was thus intravenous empirical antibiotics (cefuroxime and metronidazole) and a blood transfusion.

An incisional biopsy of this lesion revealed invasive mucinous secreting adenocarcinoma of colonic origin. A computed tomographic scan demonstrated a small communicating fistula between the external lesion and a caecal mass (*Figure 2*). There was no clinical or radiological evidence of pulmonary or hepatic metastases. A barium enema showed an obstructing lesion in the proximal colon. The discharge from the sinus grew *Escherichia coli*.

He underwent a right hemicolectomy and ileotransverse anastomois with excision of the exophytic portion of the tumour. It was impossible to resect the entire exophytic component. The resulting defect was filled with a local abdominal wall flap and split skin grafting. Despite extensive local invasion of adjacent structures, the regional lymph nodes and the liver appeared free of tumour. Histology revealed a mucin-secreting adenocarcinoma involving all layers of the colon. All lymph nodes identified were clear of tumour.

His postoperative recovery was uneventful and he was discharged 2 weeks later with plans for adjuvant radiotherapy. Unfortunately, 4 months later the tumour recurred at the skin graft site. The patient declined further surgery and died 6 months after initial presentation.

1950), and 20% of caecal adenocarcinomas are of the mucoid type (White et al, 1973). Mucinous adenocarcinoma is a well-differentiated slowly progressive neoplasm with a low incidence of lymphatic or blood-borne metastasis.

It is interesting that in this patient there was no involvement of regional lymph nodes nor any widespread metastases. Spratt et al (1970) identified a group of colonic tumours that invade extensively through mesenteric fat and muscle in the absence of metastases in the lymph nodes. Neither size nor depth of invasion through the bowel wall or into adjacent organs was a good criterion for predicting the presence of metastases in lymph nodes.

Invasion of the abdominal wall does not of itself indicate that the tumour is unresectable and such patients are therefore potentially curable (White et al, 1973). Spratt et al (1970) observed that when these lesions are amenable to resection, the depth of invasion has no effect on prognosis unless the excision is incomplete. Unfortunately, in this patient the tumour was too large to resect completely and the tumour recurred 4 months later. Merrill et al (1950) reported a recurrence rate of 30% in their series of patients. However, even in the absence of complete cure, palliation and prolonged survival might follow extensive resection in such cases.

It is worth mentioning cutaneous metastases from colon cancer which are highly unusual. When they do occur it is most frequently on the abdominal wall. The Sister Mary Joseph nodule is an example of abdominal cutaneous metastases from an adenocarcinoma of the gastrointestinal tract. The lesion, which can present as either a subcutaneous nodule or an exophytic, ulcerated umbilical mass, is the cutaneous manifestation of an advanced gastrointestinal carcinoma. The most frequent source is the gastric carcinoma with colon carcinomas accounting for approximately 10%. The lesion is named in honour of the Mayo Clinic nurse who recognized the lesion and its ominous significance. **HM**

Merrill JG, Dockerty MB, Waugh JM (1950) Carcinoma of the colon perforating onto the anterior abdominal wall. *Surgery* **28**(4): 662–71

Spratt JS Jr, Watson FR, Pratt JL (1970) Characteristics of variants of colorectal carcinoma that do not metastasize to lymph nodes. *Dis Colon Rectum* **13:** 243–6

Staniland JR, Ditchburn J, Dombal FT (1976) Clinical presentation of diseases of the large bowel. A detailed study of 642 patients. *Gastroenterology* **70:** 22–8

Welch JP, Donaldson GA (1974) Perforative carcinoma of colon and rectum. *Ann Surg* **180:** 734–40

White AF, Haskin BJ, Jenkins CK, Pfister RC (1973) Abscess of the abdominal wall as the presenting sign in carcinoma of the colon. *Cancer* **32:** 142–6

In the Public's View...

Vomiting on the high seas

Anyone would think P&O had put smallpox virus in the drinking water. A representative of P&O was interrogated – there is no other word for it – on Radio 4's PM programme during the outbreak of illness on the cruise ship Aurora. The reporter kept on about frantic passengers confined to their cabins and the irresponsibility of P&O in not ensuring perfect health on board. I'm not quite sure how the representative managed to keep his temper, and why he didn't just say, 'Oh for heavens sake! It's only 24 hour D&V!' and storm out of the studio. But that's why he fields the media's questions, and I keep my head down, preferring the cool contemplation of written journalism.

Norwalk virus, which was the culprit, is common where there is confined living. Residential homes are especially prone. The long-stay medical wards in our hospital are forever being closed for admissions and discharges, and subsequently deep cleaned. Over the winter, there can hardly be more than a couple of weeks when all the medical wards are open. The local media barely take notice. Norwalk is endemic and self-limiting. Only the very young, very old, and seriously debilitated are likely to suffer more than a day or so of unpleasantness.

I'd forgotten to keep a newspaper cutting about the Aurora, and couldn't remember the name of the ship. I thought putting 'Norwalk' and 'cruise' into Google would give me all the information I needed. Confined living includes cruise ships: there was story after story of cruise ships full of vomiting passengers. Luckily, I remembered that the Greek authorities had prohibited the Aurora's holidaymakers from landing, put the additional word 'Greek' into Google, and found the Aurora. One newspaper reported that the bottle of champagne intended for her bows at her launch had instead slipped its attachment and dropped into the water of the dock. As this year's outbreak of Norwalk was Aurora's second in as many years, the incident was clearly causative and I intend suggesting to our infection control department that they sluice down the medical wards with champagne to prevent future outbreaks in the hospital.

But it's rich that the Greeks and Spaniards (who closed the border with Gibraltor while the docked) took such drastic action. There are plenty of holidaymakers who go to Greece and Spain, or anywhere abroad, and spend a day or two of their fortnights confined to the en-suite facilities. I'm not aware that the authorities immediately pounce on those hotels and quarantine the guests, although the spread of Norwalk infection within the hotels is more likely than the spread from wandering ship passengers. It's no wonder the public is confused about health risks when politically motivated actions are presented as issues of public health.

Like a dog with a bone, the media rung all they could out of the story. After the Aurora had docked, I caught a headline on an inside page somewhere that two patients had died on board. But they hadn't died because of Norwalk; they were both elderly men whose heart disease had carried them off. A non-story to cap a non-story. **HM**

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