Letters to the Editor

Small Bowel Intussusception: A Rare Complication of Renal Cell Carcinoma

The Editor

Sir,

Renal Cell Carcinoma (RCC) spreads readily to lung, bone and skin. It is unusual to have metastases to the bowel at the time of diagnosis. Additionally, it is distinctly rare for these uncommon bowel deposits to cause intestinal obstruction due to intussusception, with only one case previously described. (1)

In August 2001, a 69-year-old female presented to General Hospital, Port-of-Spain with signs and symptoms of small bowel obstruction. Three months prior to presentation, she had a right nephrectomy for a histologically confirmed RCC. A small portion of peritoneum was resected due to its adherence to the primary tumour. There was no evidence of intra-abdominal spread either intra-operatively or on pre-operative CT scan (Fig. 1). A tentative diagnosis of obstruction due to adhesion was made and conservative management commenced.

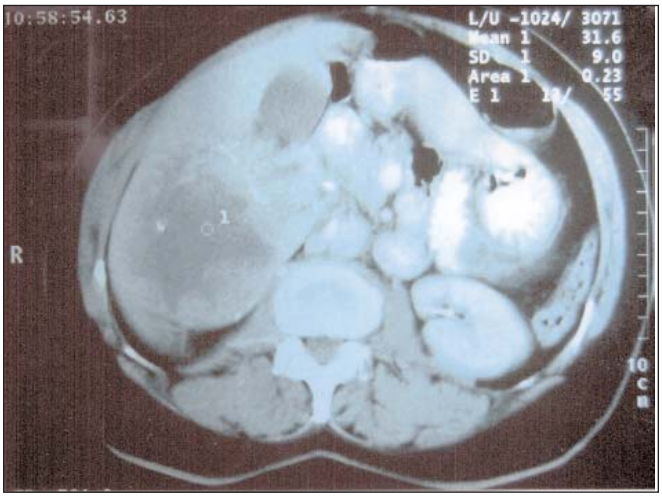

Fig. 1: CT scan of right renal mass. This CT scan shows a 9x10x15cm solid mass in the mid to upper pole of the right kidney with central cystic necrosis.

After four days of failed conservative treatment, a laparotomy was performed which revealed an ileo-ileal intussusception, the apex of which was a 2 cm x 3 cm intraluminal pedunculated tumour causing serosal dimpling. Histopathological examination of this tumour confirmed submucosal metastatic renal cell carcinoma (Fig 2).

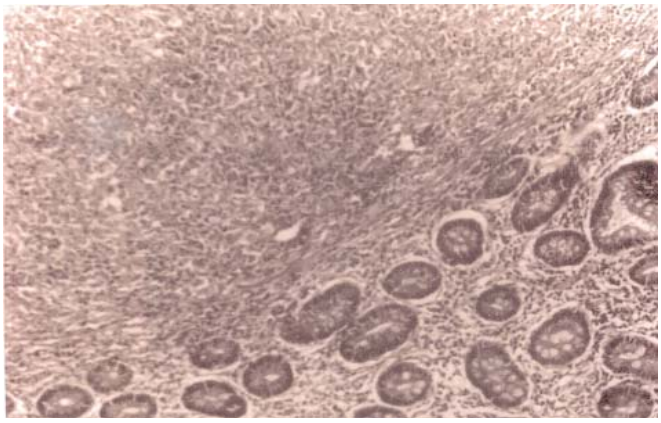

Fig. 2: Histopathological section of renal cell carcinoma. Photomicrograph shows metastatic renal cell carcinoma invading the muscularis layer of small bowel (magnification power x 40).

Thirty per cent of patients have metastases at the time of diagnosis of primary RCC (2). The most common sites for spread are the lungs (50–55%), bone (49%), skin (11%), liver (8%) and brain (3%) (3, 4).

Small bowel metastasis from renal cell carcinoma is exceedingly rare (1). Even rarer is intussusception due to such a secondary deposit.

Small bowel metastases are more likely to have occurred from malignant melanoma, bronchogenic carcinoma and colonic cancer (5), or even from testes, stomach, breast, ovary, uterine corpus, adrenal glands, plasmacytomas and leukaemia (2).

The diagnosis in this case was only made at laparotomy. The delay in diagnosis was due to the very low index of suspicion and the fact that the peritoneum had previously been breached, leading one to believe that adhesions were the cause of her intestinal obstruction.

Autopsy studies have reported rates of small bowel spread from RCC as high as 14.6% (1). Hence, it is possible that bowel metastases from RCC may be under-diagnosed at the time of initial presentation. Such secondaries can therefore produce small bowel obstruction either from mass effect or very rarely from intussusception. It is the authors' opinion that patients presenting with features of intestinal obstruction after resectional procedure for RCC should not simply be treated expectantly as obstruction from adhesion, especially if the peritoneum remained undisturbed as in retroperitoneal surgery. Instead, a more aggressive approach should be

adopted. This policy may avoid protracted starvation, facilitate earlier surgery and could minimize complications of prolonged hospitalization.

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Primary Cutaneous Nocardiosis: An Emerging Pathogen Associated with a Peripheral Intravenous Catheter

The Editor

Sir,

Nocardiosis is an infection caused by members of the genus Nocardia, an aerobic actinomycetaceae. These are saprophytic bacteria which are important components of soil and water. Nocardia have worldwide distribution and are not thought to be commensals of the skin (1, 2). About 10% of infections of the skin and subcutaneous abscesses result from direct inoculation of Nocardia from the soil. Subcutaneous nocardiosis resulting from haematogenous spread occurs in 25% of cases (3). Appropriate management of nocardial infections is critical, particularly in immunocompromised patients in whom mortality rates may be as high as 29% (1, 4). This report describes the development of primary cutaneous nocardiosis at the insertion site of a peripheral intravenous catheter in a patient with ulcerative colitis.

An asthenic 44-year old man with a six-year history of ulcerative colitis was admitted to the University Hospital of the West Indies (UHWI) as a result of exacerbation of his condition. On admission, a peripheral polyurethane intravenous (IV) catheter was inserted into his left forearm for the intravenous administration of fluids, hydrocortisone (600 mg per day), amoxycillin-clavulinic acid (3 mg/day), oral prednisone (40g/day) and mesalazine (3.6g/day). This catheter was removed and a new polyurethane intravenous catheter was inserted in the patient's right forearm on day three. This intravenous site remained functional for seven days, after which the catheter was removed following the development of an erythematous area of induration (1x1cm) at the insertion site. The patient was at this time afebrile with haemoglobin (Hb) of 8.8g/dL and white blood cell count of 12.8 x 10^9 /L.

Amoxycillin-clavulinic acid was discontinued and cloxacillin (2g/d) commenced. The area of induration on the right forearm progressed to become a painful fluctuant mass, measuring 4 x 4 cm over the next eight days. Incision of the mass resulted in the drainage of 10cc of creamy yellow pus and *Nocardia spp* was confirmed using standard microbiological investigations (2, 3). Blood and sputum cultures were negative. Oral trimethoprim-sulfamethoxazole was added to the treatment regime for a period of two weeks with complete resolution of the abscess. Follow-up blood cultures remained negative.

Peripheral intravenous catheters although commonplace in the hospital environment are associated with an increased risk of direct inoculation of organisms into the skin which may result in disseminated infection and death (5–7). The point of origin of the forearm abscess in this patient correlated precisely with the site at which the intravenous catheter was inserted. Nocardia is an unusual pathogen associated with the use of intravenous catheter infections. Early detection and appropriate management is necessary in the prevention of possible severe and fatal complications (1, 4).

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