Pre-operative hydrostatic reduction of intussusception in an adult

M I M De Zoysa¹ and C Halahakoon²

(Index words: intussusception, caecal tumour, hydrostatic reduction)

Case report

A 43-year old female had episodes of severe and worsening colicky pain confined to the right side of the abdomen for 3 days. The episodes of pain were not associated with vomiting or abdominal distension. She had no history of altered bowel habits, loss of appetite or progressive loss of weight. The pain was associated with a palpable sausage-shaped mass to the right of the umbilicus. Ultrasound scan of the abdomen was suggestive of an intussusception in the right iliac fossa. Ultrasound scan of the abdomen was suggestive of an intussusception in the right iliac fossa. Contrast enhanced CT scan of the abdomen (Figure 1) confirmed the diagnosis of a right colo-colic intussusception. There were no liver metastases. During the last episode of colic, hydrostatic reduction of the intussusception was performed successfully. About two litres of normal saline was allowed to flow into the rectum through a rectal tube, keeping the container 1m above the level of the patient with the foot end elevated. The patient was kept in that position until the pain subsided and the lump disappeared. Reduction was achieved in 35 minutes.

Colonoscopy performed 3 days later after bowel preparation revealed a polypoidal growth in the caecum. Histology showed a moderately differentiated adenocarcinoma. An elective right hemicolectomy was performed 10 days after reduction of intussusception. Histology revealed a 2 cm wide moderately differentiated adenocarcinoma which was involving the serosa (Dukes B, pT3, pN0, pM0). She was given a course of 5-fluorouracil based chemotherapy. She was followed up with ultrasonography, colonoscopy and serum CEA and was free of local recurrence or metastatic disease six years after surgery.

Discussion

Intussusception is rare in adults with an incidence of around 2-3 per 100,000 per year. The use of investigations including a barium enema, ultrasound scan and computed tomography (CT) can be helpful to establish the diagnosis. The classical ultrasonic appearance is a doughnut sign in transverse view and pseudo-kidney sign on longitudinal view [1]. CT scan has a diagnostic accuracy of around 80%. The classical finding on a CT scan is a target lesion which represents the outer intussusceptions and the inner intussusceptum. The dense intussuscepted mass comprising of swollen bowel and mesentery within the lumen of the bowel is responsible for the characteristic target lesion seen on the CT scan [2]. Colonoscopy can be used in preoperative diagnosis although it is technically challenging [3].

In more than 90% of adults a lead point can be identified as a cause for the intussusception. This is usually a polyp or a tumour and in two thirds of these cases the colonic tumours are malignant. Old age and anaemia have been shown to be predictive of malignancy in multivariate analyses [4]. There was no reason to suspect a colonic malignancy in this patient as she was young and not anaemic.

In general, operative intervention is required in all cases of adult intussusception as conservative treatment is not effective [5]. However, in this patient we were able to reduce the intussusception successfully. As expected the volume of saline used was substantially higher than that required in children. It was possible to perform a semi-elective diagnostic colonoscopy after bowel preparation. Moreover, elective right hemicolectomy was planned after appropriate counselling. She was free of symptoms from the time of reduction to the time of surgery. A few authors have described intra-operative reduction of intussusception before resection as it helps in better planning of the extent of resection. However, most authors do not recommend this due to a higher incidence of malignancy in these cases and hence the risk of tumour embolisation and seeding [5]. This patient was disease free six years after surgery indicating that pre-operative reduction had been safe.

¹Department of Surgery, Faculty of Medicine, University of Colombo, Sri Lanka and ²University Surgical Unit, National Hospital of Sri Lanka.

Correspondence: MIMdeZ, e-mail <ishandz@hotmail.com>. Received 7 July and accepted 19 September 2009. Competing interests: none declared.
Oro-genital ulcers with a positive pathergy test in acute myeloid leukaemia

B L P P Balasooriya¹, H F S Fonseka², S Williams³ and A Premawardhena¹

(Index words: leukaemia, genital ulcer, Behcet's disease)

Introduction

We report a young girl who presented with painful oral and genital ulcers and a positive pathergy test as a result of acute myeloid leukaemia M4 subtype. This is the first case report of this combination of signs and symptoms reported in acute myeloid leukaemia (AML).

Case report

An 18-year old unmarried girl presented with intermittent high grade fever and painful oro-genital ulcers of one month duration. Her past medical history, sexual history and family history were unremarkable. Clinically she was ill with tender mucosal ulcers in the mouth as well as in the genitals. There was no lymphadenopathy, hepatosplenomegaly or a skin rash. Her eyes were normal. One week later, she developed an asymmetrical, large joint arthritis involving the knees and ankles and painful tender red nodules over the shins, suggestive of erythema nodosum. Within 48 hours of insertion of intravenous cannulae as well as following venepuncture, pustular vesicles appeared at puncture sites (a positive pathergy test). A clinical diagnosis of Behçet's disease was made.

Her ESR was 110 mm/first hour and C-reactive protein was 190 mg/l. The blood and urine cultures were sterile. Chest x-ray and abdominal ultrasonography were normal. VDRL was non reactive. Anti nuclear antibody, HIV screening and herpes simplex antibody tests were negative.

The haemoglobin level was 9.1g/dl and white cell count was 11.7×10⁹/μl. The blood picture showed dysplastic neutrophils with pseudo pelger nuclei and 13% blast cells (Figure 1). The bone marrow biopsy suggested a diagnosis of AML (M-4). The biopsy of mouth ulcers showed leukaemic deposits.

Departments of ¹Medicine and ³Pathology, Faculty of Medicine, Ragama and ²Dermatology Unit, Teaching Hospital, Ragama, Sri Lanka.

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