## Case Report

## Benign neoplastic polyp of the caecum as a rare cause of intussusception in adults

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CASE REPORT A 73-year-old woman was admitted with a one-day history of constant aching pain in the right iliac fossa associated with anorexia, nausea and infrequent vomiting. She had a history of constipation and mild abdominal distension for two days prior to admission. She had a past history of pulmonary embolism three months earlier and was fully anticoagulated with warfarin.

Examination revealed a low-grade pyrexia with localised tenderness and guarding in the right iliac fossa but no abdominal masses could be palpated. Urine analysis was clear and haematological evaluation revealed only a leucocytosis of 15,000 and INR of 2.5. Plain abdominal radiography was normal. A provisional



Figure Barium enema showing typical appearance of ileo-caecal intussusception.

diagnosis of acute appendicitis was made. In view of the anticoagulation, she was treated conservatively with intravenous antibiotics. Warfarin was discontinued. An urgent ultrasound scan of the abdomen revealed a mass in the right iliac fossa suggestive of an intussusception, subsequently confirmed by CT scan and barium enema (Figure).

Over the next 24 hours the temperature, pain, tenderness and guarding settled. Reassessment of the abdomen revealed a  $3 \times 4$  cm firm and slightly tender mass in the right iliac fossa.

Once coagulopathy had been corrected, laparotomy revealed ileo-caecal intussusception and a small amount of pus between the caecum and anterior abdominal wall. Right hemicolectomy and ileo-transverse anastomosis was performed.

Histopathological examination demonstrated a benign neoplastic polyp of villo-adenomatous type forming the lead point of an ileo-caecal intussusception. The patient made an uncomplicated recovery and was discharged home on the 8th post operative day, after full anticoagulation was re-established.

## DISCUSSION

Intussusception is the invagination of a part of the intestine into the immediate adjacent part. With few exceptions it proceeds in the direction of peristaltic waves.<sup>1</sup> Intussusception can be

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classified according to aetiology into primary (idiopathic) and secondary (those with explanatory pathological lesion). Anatomically, intussusception can be ileo-colic, entero-enteric, ileo-caecal or colo-colic. Primary intussusception is much more common in children, with adults comprising only 5 - 15% of cases <sup>2, 3</sup> which accounts for only 0.1% of all hospital admission.<sup>4</sup> Secondary intussusception is commoner in adults and may be caused by benign or malignant tumours, Meckel's diverticuli, chronic ulcerations in typhoid fever or tuberculosis, adhesions, aberrant pancreas,<sup>12</sup> trauma, foreign body and visceral purpura.

In a review of 1214 reported cases of adult intussusception, 45% of the cases involved the colon and 55% involved the small bowel.<sup>5</sup> Of the colon intussusceptions 48% resulted from malignant tumours and 21% from benign lesions, mainly lipoma of the ileo-caecal valve.<sup>5</sup>

Acute presentation in adult intussusception occurs in up to 20% of cases, but more commonly it presents as prolonged illness and more than 50% of patients will have had symptoms for one month or more.<sup>3</sup> Common symptoms and signs in adult intussusception include abdominal pain, tenderness and distention, nausea and vomiting, change in bowel habits and a palpable mass. Stools may contain occult blood in 30-60% of cases.<sup>6</sup>Biochemical investigations offer little help in diagnosis.<sup>7</sup> Abdominal X Ray may reveal evidence of bowel obstruction. Barium enema is diagnostic, but it does not rule out small bowel intussusception unless the contrast passes through the ileo-caecal valve into the small bowel.8 CT Scan has also been reported to be useful.<sup>9</sup>

As adult intussusception has a demonstrable cause in over 90% of cases,<sup>4</sup> the treatment is surgical.<sup>2</sup> There is no place for conservative treatment or attempts at hydrostatic reduction by enemas.<sup>1,10</sup> As most colo-colic intussusceptions have malignant lesions as a lead point, they require radical wide surgical resection without an attempt at reduction, which could seed the tumour intraluminally as well as systemically. Since it is not possible to distinguish benign from malignant lead point lesions in ileo-caecal intussusception intra-operatively, all lead point lesions should also be treated in a similar fashion.<sup>11</sup>

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