

A triple dose of iron deficiency anaemia

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INTRODUCTION

Iron deficiency anaemia is a common condition, occurring in 5% and 2% of women and men respectively (Looker et al, 1997). Gastrointestinal blood loss accounts for over 50% of cases (Beveridge et al, 1965). Colorectal neoplasm accounts for 27% of the diagnosed cases investigated in hospital (Cook et al, 1986) and between 4 and 13% of those investigated in general practice (McIntyre and Long, 1993). Dual pathology occurs in 5–29% of cases (Hardwick and Armstrong, 1997).

This article reports a case of iron deficiency anaemia caused by gastroduodenal ulceration, right-sided colonic carcinoma and left-sided ade-

noma. A thorough search for lower gastrointestinal pathology, despite positive upper gastrointestinal endoscopy, is essential.

DISCUSSION

Although a common clinical condition, iron deficiency anaemia remains under-investigated (Lucas et al, 1996). Gastrointestinal symptoms may help direct investigations (Gordon et al, 1994); however, the correlation between symptoms and underlying pathology is poor (Cook et al, 1986; McIntyre and Long, 1993).

In this case the persistent anaemia was caused by coexistent upper gastrointestinal pathology and colonic carcinoma. Adenomas rarely bleed

substantially (Ahlquist et al, 1989) and in this case was probably an incidental finding. Carcinoma of the ascending colon is a leading cause of iron deficiency anaemia. Delay in diagnosis

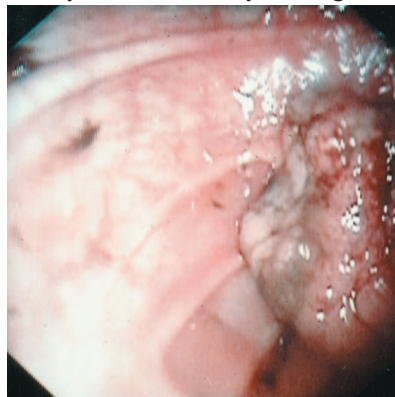


Figure 1. Colonoscopic view of villous adenoma identified in sigmoid colon.

CASE REPORT

A 81-year-old ex-smoker, who previously smoked 20 cigarettes/day, and had an alcohol consumption of 8–10 units/week, presented with a 3-month history of 'indigestion' and breathlessness. He denied weight loss, dysphagia, vomiting, change in bowel habit or melaena. He denied taking aspirin or other non-steroidal anti-inflammatory medication. He suffered from ischaemic heart disease with biventricular dysfunction. He was pale and had a blood pressure of 140/60 mmHg with no postural drop. The rest of the examination was unremarkable.

Investigations showed a hypochromic (mean corpuscular volume 56.1 fl) microcytic (mean corpuscular haemoglobin 13 pg) anaemia with numerous hypersegmented neutrophils on blood film, a haemoglobin of 7.1 g/dl and serum ferritin of 4 µg/litre. Vitamin B₁₂ and serum folate concentrations were normal. Upper gastrointestinal endoscopy demonstrated a 5 mm prepyloric ulcer and a 10 mm benign duodenal ulcer. Multiple biopsies were negative for *Helicobacter pylori*. Histology showed chronic gastritis and no malignant or dysplastic cells.

He was transfused 3 units of packed cells, and commenced on ferrous sulphate and omeprazole before discharge home with a stable haemoglobin (11.4 g/dl). Six months later he again developed iron deficiency anaemia. His haemoglobin remained low (haemoglobin 8.2 g/dl, mean corpuscular volume 62.5 fl and ferritin 6 µg/litre). His appetite remained reasonable, weight steady and bowel habit unchanged.

Repeat upper gastrointestinal endoscopy showed an abnormal ulcerated duodenal cap. Biopsy excluded neoplasm, *Helicobacter pylori* or infestation with giardiasis. Flexible sigmoidoscopy revealed grade II haemorrhoids and a large 2 cm tubulovillous adenomatous polyp in the sigmoid colon at 30 cm (Figure 1). Chest X-ray, abdominal ultrasound and carcinoembryonic antigen level were normal. Double contrast barium enema showed sub-total obstruction in the ascending colon (Figure 2). Radical right hemicolectomy and mesenteric node clearance of a bulky, Dukes B moderately differentiated mucinous adenocarcinoma was performed. Three years on he remains well, his haemoglobin level is 11 g/dl and there is no evidence of tumour recurrence.



Figure 2. Double contrast barium enema. Contrast is seen filling the sigmoid, descending and most of the transverse colon with abrupt termination at the distal part of the ascending colon/proximal portion of the transverse colon.

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results from failure to initiate or to complete investigations of iron deficiency anaemia (Goodman and Irvin, 1993).

Colonic assessment of all patients with iron deficiency anaemia would be impractical and expensive. A more practical approach is necessary. In patients over 50 years of age, up to 20% have dual pathology (Gordon et al, 1994). Therefore in this age group, lower gastrointestinal investigation should be mandatory regardless of the upper gastrointestinal endoscopy findings. One exception might be in those patients found to have a primary malignancy of the upper gastrointestinal tract.

For patients less than 50 years of age, if an upper tract cause is found and there are no clinical indicators or

genetic susceptibility then lower gastrointestinal investigations are unnecessary.

CONCLUSIONS

In elderly patients with persistent iron deficiency anaemia a search for multiple pathologies is essential. Examination of the lower gastrointestinal tract should be performed in all cases. Anaemia should not be attributed to trivial lesions. In 5% of cases no cause will be found (Mujica and Barkin, 1996). **HM**

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IN THE PUBLIC'S VIEW...

Retrospective ethics: a block to progress?

There is a new disease rampant in the world. Perhaps it is not a new disease; perhaps it is just becoming more obvious. Whichever, it does great harm. The disease is 'retrospective ethicitis': finding blame for what happened yesterday on the basis of the ethics of today. In the wider world it appears in the attempts by ethnic groups to wring apologies from governments for the behaviour of previous governments, even though it is sometimes hundreds of years since the original hurt. In medicine, its latest manifestation is the parents seeking recompense in the courts because pathological specimens were removed from their dead children without consent.

Events over the last year or so have completely altered practice in pathology. One of the parents, Mrs Noreen Hodgkinson, said that she was asked for permission for a post-mortem, but that there was no mention of organ removal. This was standard practice 10 years ago (although what did peo-

ple imagine happened at a post-mortem?). No one now does a post-mortem without a full explanation and the reluctance to go into the full details is putting us in danger of a different situation.

Necessary post-mortems are now not being done because it is felt the relatives are in no fit state to be approached for consent. But, with luck, this situation should not last long. With a more open approach, people will soon get used to the idea that a post-mortem isn't done just for the morbid fascination of doctors who like to cut up dead people, but to improve medical knowledge.

And that needs to be emphasized. These children are dead. At the moment, in this country, children are being harmed and wronged, or are getting inadequate care. Living children. There are poor children, with alcoholic, violent parents. There are children in all social classes being abused by stepparents. Paediatricians wrote editorials in leading journals

complaining that children were barely mentioned in the National Plan. Unless Mrs Hodgkinson and the other parents are going to give away any damages awarded to children's health care, they should think carefully before they sue a hospital. Even if they are going to give away their damages, who do they think is going to pay the lawyers?

It is immeasurably sad to lose a child. All cultures recognize the need to have a body to grieve over, but this current furore is a cynical, emotionally driven campaign. The campaign is being run by the lawyers, who will be taking money from the health care of children who need treatment now. It is being promoted by the media, who like nothing better than grieving parents. Dragging them through the courts will ensure they will carry on grieving for a lot longer yet, and for a lot longer than they need to. **HM**

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