Letters

Investigating iron deficiency anaemia

To the Editor: The response of Sievert and colleagues for the Gastroenterological Society of Australia[1] to an article on iron deficiency anaemia in a young woman[2] missed the point. In the absence of menorrhagia, dietary deficiency of iron is extraordinarily rare unless the individual is a vegan. The young woman presented with a haemoglobin level of 61 g/L and was treated with iron supplements over a period of almost 2 years. She therefore had bleeding which was likely to be somewhere in the gastrointestinal tract.

In this situation, there are three options to exclude: colorectal cancer, a gastrointestinal stromal tumour and, more remotely, the possibility of Crohn's disease. Colonoscopy is mandatory and, if that is negative, the small intestine should be investigated using magnetic resonance enterography or video capsule endoscopy.

Sievert et al argued, based on supporting literature,[3,4] that iron deficiency is common among premenopausal women. It is implausible to withhold colonoscopy in such circumstances because of the risk of life-threatening complications. Although perforation may occur, it does not necessarily lead to death, and the alternative is to miss a lesion that may well cause death if not diagnosed.

It is well recognised that colorectal cancer occurs in younger age groups. In 2011, Davis and colleagues[5] described its incidence among 35–39-year-olds, identifying a 60% increase since 1987 and a 71% increase since 1993. The National Health and Medical Research Council *Clinical practice guidelines for the prevention, early detection and management of colorectal cancer* (http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/cp106_0.pdf) are now 8 years old and do not reflect more recent changes in age-related prevalence in colorectal cancer. Although Australian data suggest that there is an increased risk of polyps or cancer in up to 20% of patients screened between 40 and 50 years of age,[6] four in five patients present with no discernible risk factors.

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1 Sievert W, Macrae FA, Leggett BA; Gastroenterological Society of Australia. Investigating iron deficiency anaemia. *Med J Aust* 2013; 198: 563.
2 Anonymous. Iron deficiency anaemia in a young woman: a plea for early investigation. *Med J Aust* 2013; 198: 562.
3 Jacobs A, Butler EB, Menstrual blood-loss in iron-deficiency anaemia. *Lancet* 1965; 2: 407-409.
4 Price DC, Forsyth EM, Cohn SH, Cronkite EP. The study of menstrual and other blood loss, and consequent iron deficiency, by Fe59 whole-body counting. *Can Med Assoc J* 1964; 90: 51-54.
5 Davis DM, Marcet JE, Frattini JC, et al. Is it time to lower the recommended screening age for colorectal cancer? *J Am Coll Surg* 2011; 213: 352-361.
6 Bolin T, Benstock S, Fernon V, et al. Further evidence to lower the recommended screening age for colorectal cancer. Poster 1762. Proceedings of the 78th Annual Scientific Meeting and Postgraduate Course of the American College of Gastroenterology; 2013 Oct 11-16; San Diego, Calif. ❑

To the Editor: The Gastroenterological Society of Australia (GESA) response[1] to the anonymous father's heartfelt account of the suffering and ultimate death of his daughter,[2] misdiagnosed on a number of occasions by general practitioners and medical specialists, was, in my view, inadequate.

The young woman certainly warranted a colonoscopy, if not at presentation then certainly after 6 months of unsuccessful iron replacement therapy. Sievert and colleagues should have stated this emphatically in their response, rather than arguing that it "would have come within [GESA] recommendations for further diagnostic investigation".[1] Carcinomas of the right colon typically present with iron deficiency anaemia (IDA). There is no natural reason for men to be losing blood; however, in premenopausal women, IDA can be attributed to menstruation or dietary causes. These should be diagnoses of exclusion.

Every patient referred to me with significant IDA is given a recommendation for endoscopy and colonoscopy. If these return negative results, then treatment of menstrual disorders, iron supplementation and dietary modification can be done with confidence.

The tragedy with the young woman is that she was referred to a specialist when the anaemia failed to respond to treatment, and an endoscopy was performed but, inexplicably, not a colonoscopy, which could have been done at the same time.

The GESA cautioned about overinvestigation of anaemia in young patients,[1] presumably based on the risks associated with colonoscopy. However, in its guidelines, the GESA recommends colonoscopy in patients with positive faecal occult blood test results; most of these colonoscopies return negative results (http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/fobt). There does not seem to be concern about risk here.

> "In the absence of menorrhagia, dietary deficiency of iron is extraordinarily rare"
>
> Bolin

> "menstruation or dietary causes ... should be diagnoses of exclusion"
>
> Williams

Most colon cancers in young patients are genetically based, but family medical history is not always accurately known (or may not be known at all in cases of adoption).

Let's get this right. All adult patients presenting with significant IDA should be offered an endoscopy to rule out coeliac disease and upper gastrointestinal tract bleeding, and a colonoscopy to rule out colon cancer, especially of the right colon. In these cases, it is imperative to visualise the caecum. These diagnostic steps should be incorporated into GESA guidelines and emphasised to medical students and young doctors.

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1 Sievert W, Macrae FA, Leggett BA; Gastroenterological Society of Australia. Investigating iron deficiency anaemia. *Med J Aust* 2013; 198: 563.
2 Anonymous. Iron deficiency anaemia in a young woman: a plea for early investigation. *Med J Aust* 2013; 198: 562. ❑

In reply: We appreciate the interest of Bolin and Williams regarding our article.[1] We agree that further investigation of iron deficiency anaemia was indicated in this patient, as her clinical presentation of severe, unexplained anaemia is clearly articulated in the Gastroenterological Society of Australia recommendations as requiring such diagnostic investigation, as stated in our article. Colonoscopy would have been the most appropriate investigation. Williams states that all adults with significant iron deficiency anaemia should undergo endoscopy and colonoscopy. While no one would argue that the young woman did not have significant anaemia, there is no agreed definition of what is, or is not, significant. Given the common occurrence of iron deficiency in premenopausal women, prudent physicians and surgeons must consider the necessity for further investigation in each individual, given

that dietary deficiency or menstrual loss are much more common than colorectal cancer in young women. This does not mean that young anaemic women should never undergo endoscopy or colonoscopy; it means that clinical judgement, including thorough history-taking, is required in the decision-making process.

While faecal occult blood testing has no role as a primary diagnostic test for gastrointestinal bleeding, it has a proven, evidence-based role in population screening for colorectal cancer. Williams notes the Gastroenterological Society recommendation for colonoscopy following a positive faecal occult blood test. In this situation, clinicians should consider each patient's individual risk–benefit profile for colonoscopy before proceeding with the procedure.

In regard to the change in colorectal cancer incidence[2] referred to by Bolin, we note that the absolute increase in the age range of the young woman in our article (20–24-year-olds) was low: 0.6 per 100 000 in 1987 to 1.5 per 100 000 in 2006.

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1 Sievert W, Macrae FA, Leggett BA; Gastroenterological Society of Australia. Investigating iron deficiency anaemia. *Med J Aust* 2013; 198: 563.

2 Davis DM, Marcet JE, Frattini JC, et al. Is it time to lower the recommended screening age for colorectal cancer? *J Am Coll Surg* 2011; 213: 352-361. ❑