

Ottawa rule did not miss any important intracranial diagnosis in this cohort, including viral meningitis (n=6; 1.6%), subdural haematoma (n=3; 0.8%), intraparenchymal haemorrhage (n=5; 1.4%), arteriovenous malformation (n=2; 0.6%) and primary brain neoplasm (n=1; 0.3%). The scope of the Ottawa rule therefore may be wider than previously described and its clinical applicability may not be limited only to patients with a thunderclap headache. This study, however, is retrospective. These results should therefore be considered as hypothesis generating rather than confirmatory and would require validation within the context of a prospective study.

The results of our study add to the growing body of evidence for the use of this tool and although it will not usurp the opinion of the clinician it may be helpful for risk stratification and to facilitate the discussion with radiological colleagues when requesting CT in patients with acute non-traumatic headache presenting to the emergency department. ■

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Iron deficiency without anaemia

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Editor – We read with interest the article from Al-Nassem and colleagues.¹ The points about diagnosis and management of iron deficiency without anaemia (IDWA) were most informative and will affect our practice. As a learning point, we would like to add a comment about the dermatological manifestations of IDWA. Their Fig 3 begins with ‘Effects of iron deficiency on the human body’; we would like to point out a very common presentation of iron deficiency has not been mentioned: ie pruritus. The authors have mentioned dry skin and hair loss that we see in dermatology (iron deficiency can cause chronic telogen effluvium), but other well-recognised manifestations of iron deficiency include angular cheilitis, koilonychia and pruritus.

Pruritus is a common presenting complaint to general medics, general practitioners and dermatologists, and iron deficiency is a commonly regarded cause of this symptom, even in the absence of anemia.² In some cases, iron replacement leads to complete cessation of pruritus very shortly after commencement of therapy, thus resolving what may otherwise be a debilitating and frustrating condition.³

In a previously conducted prospective case-control study, the most common cause of generalised pruritus in patients with underlying systemic disease was found to be iron deficiency anaemia (25% of all patients with pruritus with systemic disease). Based on this study, the British Association of Dermatologists guidelines recommended that full blood count and ferritin levels should be checked in all patients with chronic generalised pruritus without rash.³

As such, we would like to remind our colleagues to remember that the itchy (rash free) patient can be a classic presentation of iron deficiency (with or without anaemia). ■

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Chronic diarrhoea

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Editor – Hiner and Walters’ article was a succinct and informative read, however, it was very disappointing to see that not only was HIV omitted as a potential cause of chronic diarrhoea, there was no mention of any sexually transmitted infections (STIs) or importance of sexual history taking.¹

Chlamydia (particularly serovar L1–3), lymphogranuloma venereum (LGV), gonorrhoea, syphilis, herpes and shigella all commonly present with anorectal manifestations, including chronic diarrhoea, particularly in men who have sex with men (MSM). In 2019, Public Health England recorded 77% of all sexually transmitted shigella as being in the MSM population, as well as 37% of all LGV diagnoses that year recorded as rectal infections in MSM.² However, if a sexual history isn’t taken, then sexual orientation is unknown and risk stratification inaccurate.

In the UK, it’s estimated that almost one in 10 of HIV positive individuals do not know their HIV status and, of those diagnosed, approximately 50% are diagnosed late (defined as a CD4 count <350 cells/mm³).^{3,4} It almost goes without saying that late diagnosis of HIV is associated with increased morbidity and hospital admissions, and decreased life expectancy.⁵ In one cohort, 62% of patients who were diagnosed late with HIV had presented to secondary care prior to their diagnosis, with 26% having symptoms which were probably related to HIV but they were not tested for HIV.⁶

The Royal College of Physicians *Concise guidance to good practice* series outlines clinical indicator diseases for HIV infection, of which, chronic diarrhoea is highlighted.⁷ Chronic diarrhoea is also listed as one of the symptoms *most* associated with HIV infection, alongside weight loss and pyrexia of unknown origin.⁷

Many patients undergo endoscopic procedures as part of their work-up, however, a simple chlamydia/gonorrhoea swab typically costs less than £10, as does an HIV test. A full sexual history and STI testing could therefore be a relatively cheap way to negate the need for expensive and invasive investigations.

We have made huge progress with regards to awareness of HIV, but we must normalise testing in both primary and secondary care to decrease late and unknown HIV diagnoses. ■

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latter contexts as well, CTPA can be deferred and pre-emptive thrombolysis initiated instead.^{8,9}

Alternatively, emergency pulmonary embolectomy might be deployed, as was the case in a haemodynamically compromised PE patient in whom transoesophageal echocardiography showed McConnell's sign as well as impending paradoxical embolism characterised by a thrombus straddling a patent foramen ovale.¹⁰ ■

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Point-of-care transthoracic echocardiography

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Editor – The point is well made that increased use of computed tomography pulmonary angiography (CTPA) in patients with low pretest probability of pulmonary embolism (PE) might pose unnecessary risk of harm to patients, and might also be an inappropriate use of scarce resources. On the other hand, when pretest probability of PE is sufficiently high, based on the presence of symptoms, ultrasonographically validated deep vein thrombosis (DVT) and D-dimer cut-off levels compliant with those proposed by Tuck *et al*, identification of stigmata of PE by point-of-care transthoracic echocardiography (TTE) might be a satisfactory alternative to CTPA.¹

The utility of point-of-care TTE as an alternative to CTPA was validated in anecdotal reports involving PE patients with cardiogenic shock or cardiac arrest.^{2–5} In all four instances, TTE showed right ventricular dilatation, which, in the context of cardiogenic shock, is highly predictive of PE or its close mimic, right ventricular myocardial infarction, the distinguishing feature of the latter being ST elevation in leads V4R–V7R.^{6,7} In all four instances, pre-test probability of PE was enhanced by ultrasonographic documentation of deep vein thrombosis.^{2–5} Most crucially, in all four instances, pre-emptive thrombolysis proved to be life-saving.

Stigmata of PE, which can be identified by TTE in haemodynamic crisis include not only right ventricular dilatation but also free floating right heart thrombus and McConnell's sign.^{2–5,8,9} In the

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The index of suspicion for iron deficiency in non-anaemic subjects

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Editor – A subnormal level of either the mean corpuscular haemoglobin (MCH) or the mean corpuscular haemoglobin concentration (MCHC) could be the first sign of iron deficiency without anaemia (IDWA). The underlying reason for this phenomenon was identified in a study of 219 female athletes aged 15–20 years. What emerged was that, during the progression from the status of normal iron stores (defined as serum ferritin ≥ 30 $\mu\text{g/L}$) to iron deficient status (defined as serum ferritin < 30 $\mu\text{g/L}$) the fall in MCH and MCHC antedated the fall in mean corpuscular volume (MCV), with the consequence that a stage was reached where iron deficient subjects had mean values of MCH and MCHC that were significantly lower ($p < 0.001$) than the levels of those parameters in their iron replete counterparts, despite the