ANDREW THOMPSON

Taunton, UK

Letters to the editor

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Acute medical consultant, Somerset NHS Foundation Trust,

Subarachnoid haemorrhage rules

DOI: 10.7861/clinmed.Let.21.4.1

Editor – The authors of the article 'Subarachnoid haemorrhage rules in the decision for acute CT of the head: external validation in a UK cohort' have not provided the correct data to support their conclusions and, hence, this article may be quite misleading.¹

The Ottowa subarachnoid rule has been designed to determine which patients presenting to the emergency department with a nontraumatic headache that had reached maximal intensity within 1 hour of onset with normal neurological examination require exclusion of a subarachnoid haemorrhage (SAH) as the cause of the headache.² In order to validate this rule, it is essential that the same entry criteria are used (ie a nontraumatic headache that had reached maximal intensity within 1 hour of onset). The data that this article presented suggest that the inclusion criteria was all patients undergoing a computed tomography (CT) of the head for the investigation of SAH, and they excluded CT requests which included subdural, hypertensive or intracranial haemorrhage as the working diagnosis, and have not listed any other criteria for inclusion. The cardinal feature in the Ottawa study is therefore a headache within 1 hour and, for 63%, this was an instant thunderclap headache. Whereas, for the article, a thunderclap headache only represented 10% of their sample and only 18% had a headache of maximal severity within 1 hour. The indications for the CT for the remaining 82% is therefore key to understanding the article, and any attempts thereafter to calculate a sensitivity and specificity are misleading, as the rules relate to different populations.

If, as the article suggests, the CT were all performed to investigate a SAH, the current European Stroke Organisation Guideline state that lumbar puncture must be performed in a case of clinically suspected SAH if CT or magnetic resonance imaging does not confirm the diagnosis.³ So, for the purposes of the article, all 354 patients who had a negative CT should have had a lumbar puncture. The reality is only 32% of their cohort went onto have a lumbar puncture and, therefore, many of their patients presumably never had a headache for which SAH was being considered.

The National Institute for Health and Care Excellence guidelines (Subarachnoid haemorrhage due to ruptured aneurysms) are due in July 2021 and will hopefully review this issue in more detail, including the key issue of whether a negative CT of the head

References

1 Foley RW, Ramachandran S, Akintimehin A et al. Subarachnoid haemorrhage rules in the decision for acute CT of the head: external validation in a UK cohort. Clin Med 2021;21:96-100.

within 6 hours of the headache onset can safely exclude SAH and

remove the need to perform a lumbar puncture.4

- Perry JJ, Sivilotti MLA, Sutherland J et al. Validation of the Ottawa Subarachnoid Hemorrhage Rule in patients with acute headache. CMAJ 2017;189:E1379-85.
- 3 Steiner T, Juvela S, Unterberg A et al. European Stroke Organization guidelines for the management of intracranial aneurysms and subarachnoid haemorrhage. Cerebrovasc Dis 2013;35:93-112.
- National Institute for Health and Care Excellence. Subarachnoid haemorrhage due to ruptured aneurysms: In development [GID-NG10097]. NICE, Expected publication date 21 July 2021.

Response

DOI: 10.7861/clinmed.Let.21.4.2

Editor – We thank Dr Thompson for the interest in our paper and he raises some valid points. Indeed, we have not strictly adhered to the inclusion criteria of the original Ottawa rule study from Perry et al.² Using the clinical information provided on the computed tomography (CT) request we attempted to ascertain, in so far as possible, those patients undergoing a CT of the head for the investigation of subarachnoid haemorrhage (SAH). We included patients whose requests included a working diagnosis of SAH or clinical information such as sudden onset headache, thunderclap headache or 'worst headache of life'. As a retrospective study this represented our best estimation of the patient cohort undergoing CT of the head for the investigation of SAH, although as the author rightly states these patients may not truly have been suspected of this diagnosis. This is evident in the subsequently low proportion of patients in whom a lumbar puncture was performed (32%). We are, as radiologists and as researchers, limited by the clinical information that has been provided in the request. However, a subgroup analysis of patients (n=65; 18%), who do meet the strict inclusion criteria has been performed and detailed in our article. In short, the Ottawa rule was 100% sensitive in this cohort and missed no cases of SAH.

Rather than being misleading, the results of our article may in fact be hypothesis generating. In the larger cohort of patients, using the less stringent inclusion criteria, the Ottawa rule was still 100% sensitive. Although not described in our paper, the

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.

ROBERT W FOLEY Radiology trainee, University Hospitals Bristol NHS Foundation

Trust, UK

References

- 1 Foley RW, Ramachandran S, Akintimehin A et al. Subarachnoid haemorrhage rules in the decision for acute CT of the head: external validation in a UK cohort. Clin Med 2021;21:96–100.
- 2 Perry JJ, Sivilotti MLA, Sutherland J et al. Validation of the Ottawa Subarachnoid Hemorrhage Rule in patients with acute headache. CMAJ 2017;189:E1379–85.

Iron deficiency without anaemia

DOI: 10.7861/clinmed.Let.21.4.3

Editor – We read with interest the article from Al-Nassem and colleagues. 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. 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.

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).

VITHYAA PREMJEYANTH

Junior doctor, Milton Keynes University Hospital NHS Foundation Trust, Milton Keynes, UK

ALEXA SHIPMAN

Consultant dermatologist, Milton Keynes University Hospital NHS Foundation Trust, Milton Keynes, UK

References

- 1 Al-Naseem A, Sallam A, Choudhury S, Thachil J. Iron deficiency without anaemia: a diagnosis that matters. Clin Med 2021:21:107–13.
- 2 Yonova D. Pruritus in certain internal diseases. *Hippokratia* 2007:11:67–71.
- 3 Millington GWM, Collins A, Lovell CR et al. British Association of Dermatologists' guidelines for the investigation and management of generalized pruritus in adults without an underlying dermatosis, 2018. Br J Dermatol 2018:178:34–60.

Chronic diarrhoea

DOI: 10.7861/clinmed.Let.21.4.4

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 $<\!350~\text{cells/mm}^3).^{3,4}$ 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. Chronic diarrhoea is also listed as one of the symptoms *most* associated with HIV infection, alongside weight loss and pyrexia of unknown origin.

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.