

disease indicating multiple effects in lowering inflammation. Even with JAKinibs, it is clear that deep understanding in redundancy of pathways is necessary before considering a particular inhibitor for a trial/experimental therapy.

Successful clinical trials of small molecules in vasculitides will shed new light into pathogenesis, but biologic use requires careful consideration of added risks (infection or malignancy) while effectiveness also means the duration of treatment may be indefinite. Working with SHARE (Single-Hub Access for Pediatric Rheumatology in Europe) or vasculitis foundations will help physicians understand these difficult diseases and in improving patients' lives. ■

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Supplementary material

Additional supplementary material may be found in the online version of this article at www.rcpjournals.org/clinmedicine:

S1 – Use of JAKinibs in vasculitides.

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A further explanation for chest pain without visible coronary artery disease

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Editor – we read with interest the review and recommendations by Rogers *et al* on how to identify and manage functional cardiac symptoms.¹ The messages resonate with our experiences both on the acute take and in the clinic. The authors refer to 'syndrome x' as an alternative name for non-cardiac chest pain (NCCP) whereby patients have chest pain without evidence of epicardial coronary artery disease. While many cases of chest pain without epicardial coronary disease are non-cardiac in nature, it is increasingly recognised that up to 50% of patients with anginal symptoms, investigated in the catheter laboratory, have symptoms caused by

coronary microvascular dysfunction (CMD). This has become known as ischaemia with non-obstructed coronary arteries (INOCA).² INOCA can be challenging to diagnose because it is not seen at angiography. It is, therefore, frequently overlooked. This is unfortunate because it is associated with increased risk of cardiac events yet responds to stratified medical therapy.^{2,3}

Rogers *et al* describe how medically unexplained symptoms are associated with younger age and female sex, two factors which are also associated with CMD and INOCA.^{2,4} Guidelines on investigation and management of INOCA have recently been published by the European Society of Cardiology.⁵ We recognise the difficulty faced by clinicians in identifying functional syndromes and that they are highly prevalent. Given the prognostic implications of CMD and the fact that it is a potentially treatable condition, it is important that clinicians consider the diagnosis of INOCA before labelling symptoms as non-cardiac in origin. ■

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Functional disorders and chronic pain

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Editor – I read the article by Eccles and Davies with great interest.¹ I think they have highlighted well the overlapping issues of chronic pain and fatigue symptoms and the diagnostic overlap between patients with fibromyalgia and myalgic encephalomyelitis / chronic fatigue syndrome (ME/CFS).

I was, however, disappointed to note that there are a number of deficiencies within the article. While they are correct to note that there are multiple referral pathways for patients with chronic pain,