A 51-year-old Samoan woman presented to hospital due to pain in her left knee of 24 hours duration. Preceding this was a six-day history of sore throat and fever, for which she had consulted her general practitioner and had been treated with ibuprofen. A throat swab taken by her GP at this time subsequently grew *Streptococcus pyogenes*.

On examination, she was afebrile. Her tonsils were erythematous without exudate. Her left knee had restricted range of motion with a small joint effusion. Cardiorespiratory examination was normal and there was no erythema marginatum rash, subcutaneous nodules or choreiform movements.

Her bloods showed neutrophilia of 14.98x10⁹ and CRP of 209mg/L. Her midstream urine was bland and renal function was normal. A knee aspirate yielded 5ml of bloodstained fluid, which was unsuitable for cell count, with no crystals and sterile cultures. Her ECG showed normal sinus rhythm, and transthoracic echocardiogram demonstrated no valvular lesions.

Rheumatic fever was thought unlikely due to the patient’s age and the short time course. Due to the culture proven antecedent *S. pyogenes* infection, she was diagnosed with poststreptococcal reactive arthritis, and treatment was commenced with penicillin on day six of her illness to eradicate persisting *S. pyogenes* carriage.

On day 11, she reported discomfort in her left eye without photophobia or visual disturbance. Examination revealed temporal episcleral injection and a non-tender globe. Visual acuity was 6/5 in the affected left eye, and 6/12 in the right. There was no relative afferent pupillary defect, and the anterior chambers were quiet. B-scan ultrasonography did not demonstrate posterior scleritis. Blanching was seen with topical phenylephrine, leading to a diagnosis of episcleritis.

Investigations for other causes of episcleritis yielded normal titres for antinuclear, anti-double-stranded DNA, rheumatoid factor and anti-cyclic citrullinated protein antibodies, and negative C and P-ANCA.

Her episcleritis was managed with lubricating eye drops, topical corticosteroids and oral naproxen, and she completed 14 days of penicillin. Three weeks later, all her symptoms had resolved.

Discussion

Group A streptococcal (GAS) infections have been associated with a range of poststreptococcal syndromes, including poststreptococcal glomerulonephritis, rheumatic fever, reactive arthritis and paediatric autoimmune neuropsychiatric disorder associated with group A streptococci (PANDAS). These are thought to be caused by molecular mimicry, where antibodies directed against GAS antigens cross-react with antigens in host tissues.

This report describes a patient who developed episcleritis on day 11 following the onset of GAS pharyngitis. This time course is typical for poststreptococcal syndromes. While other ocular sequelae of GAS infection have been previously described, this is the first reported case of poststreptococcal episcleritis to my knowledge.

Ocular sequelae of GAS infection are rare. Of these, uveitis is the most well

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**ABSTRACT**

This report describes the case of a patient presenting with an unusual poststreptococcal syndrome that featured episcleritis as a prominent manifestation. To my knowledge, this is the first time that poststreptococcal episcleritis has been described in the literature.
described, predominantly in children and young adults. As with rheumatic fever, these cases appear to follow GAS pharyngitis or tonsillitis; cases following GAS skin infection have not been clearly documented. Uveitis was accompanied by scleritis in only two reported cases. Conjunctival disease appears rarer still, with one report of a poststreptococcal syndrome mimicking conjunctival lymphoma. The only reported case of isolated poststreptococcal scleritis describes a 60-year-old woman who developed bilateral scleritis, 10 days following commencement of amoxicillin for GAS pharyngitis. Similarly, the patient in our report developed episcleritis five days following commencement of penicillin.

Together, these reports suggest that GAS infection should be considered as a rare aetiology of episcleritis and scleritis (along with other well-described causes such as rheumatoid arthritis, systemic lupus erythematosus, inflammatory bowel disease and vasculitis). These observations also suggest that antibiotics may not be preventative in the development of these poststreptococcal complications, in contrast with their established role in preventing acute rheumatic fever.

Competing interests: Nil.

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