Reviewer's report

Title: Infective Endocarditis caused by staphylococcal endocarditis in a patient with Atopic dermatitis-a case report and literature review

Version: 3  Date: 23 April 2007

Reviewer: Anthony Carlino

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: New associations or variations in disease processes

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Comments to authors:

General

In their manuscript Mohiyiddeen et al. describe the case of a 30 year old man with a history of atopic dermatitis who presents with evidence of bacterial endocarditis. Microbiology studies implicate Staphylococcus aureus as the culprit. Manifestations of the infectious process include: fever, a generalized skin rash, palatal hemorrhages, a heart murmur with echocardiogram evidence of a mitral valve vegetation and regurgitation, neurological compromise with radiological evidence of brain emboli and renal insufficiency with proteinuria.

While the microbial flora of patients with atopic dermatitis has been characterized and an association between atopic dermatitis and increased risk of endocarditis reported as noted by the authors, the literature is scant. The case report by Mohiyiddeen et al. provides another example of a connection between Staphylococcus aureus in a patient with a history of atopic dermatitis and endocarditis. This report should serve to heighten our awareness to the likely causal relationship and engender further study at the basic science level.

Revisions necessary for publication

1. The authors note that the patient has a history of childhood eczema. Was there any evidence of dermatitis at the time of presentation? A bit more history would be useful.
2. The patient’s creatinine is elevated; what was the baseline value?
3. If the protein and blood in the urine were quantified, the values should be reported.
4. In their discussion the authors characterize the association between infective endocarditis secondary to Staphylococcus aureus and atopic dermatitis as “strong”. I’d say there’s an association, but leave out “strong” without a careful literature review.
5. The summary of the microbiology of endocarditis in the first paragraph of the discussion should include a reference.

What next?: Revise and resubmit
Quality of written English: Not suitable for publication unless extensively edited