Osler’s nodes, Janeway lesions and splinter haemorrhages

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DESCRIPTION
A 22-year-old man with a history of intravenous heroin misuse, presented with 1 week of fatigue and fever. Blood cultures were positive for methicillin-sensitive Staphylococcus aureus. Physical examination showed multiple painful 1–2 mm macular rashes on the palm and soles bilaterally (figures 1 and 2). Splinter haemorrhages (figure 3) and conjunctival petechiae (figure 4) were also noted. A transoesophageal echocardiogram demonstrated a 16-mm vegetation on the mitral valve (figure 5). Vegetations >10 mm in diameter and infection involving the mitral valve are independently associated with an increased risk of embolisation. However, he decided medical management after extensive discussion and was treated with intravenous nafcillin for 6 weeks. He returned 8 weeks later with acute shortness of breath and evidence of a perforated mitral valve for which he subsequently underwent a successful mitral valve repair with an uneventful recovery.

Classically, Osler’s nodes are on the tip of the finger or toes and painful. Janeway lesions occur on palm and soles and are non-painful. Osler’s nodes are thought to be caused by localised immunological-mediated response while Janeway lesions are thought to be caused by septic microemboli. These findings frequently overlap and are difficult to differentiate.¹ These appeared in 40–90% cases of infective endocarditis in preantibiotic era,² however, recent prospective data report the incidence to be 3–5%.³

Figure 1 Osler’s nodes in the palm and finger.

Figure 2 Janeway lesions.

Figure 3 Splinter haemorrhage.

Figure 4 Petechiae in the conjunctiva.
Splinter haemorrhages are usually oriented in the distal third of the nail. Other causes of splinter haemorrhages include, minor trauma, atrial myxoma and rheumatoid arthritis. The appearance of Osler’s nodes, Janeway lesions and splinter haemorrhages is often coincident with systemic embolisation. It is important to recognise these classic physical findings of infective endocarditis, a condition with high morbidity and mortality in which early diagnosis is the key.

Learning points

▸ Janeway lesions and Osler’s nodes are found in 3–5% of cases of infective endocarditis.
▸ Osler’s nodes, Janeway lesions and splinter haemorrhages is often coincident with systemic embolisation.
▸ It is important for clinicians to recognise these physical findings.

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REFERENCES