Osler nodule and Janeway lesion—signs of infective endocarditis

A 42-year-old man presented with abdominal pain, fever and chills for days at emergency department. The patient had a history of alcoholic liver cirrhosis, and intravenous drug abuse. On arrival, his vital signs were a temperature of 38.2°C, pulse rate of 105/min, respiratory rate of 16/min, and blood pressure of 104/68 mmHg. Physical examinations showed a diastolic murmur over right upper sternal border, several non-tender erythematous nodular lesions—Janeway lesion on the fingers (Figure 1A, black arrow), and one tender hemorrhagic macular lesion—Osler’s nodule on the toe (Figure 1B, white arrow). Laboratory examinations were as follows: white cell count, 14000/mm³, and C-reactive protein of 223 mg/l (reference value, < 3 mg/l). Computed tomography of abdomen disclosed multiple septic embolisms in liver, spleen and bilateral kidneys (Figure 1C, white arrows). In addition, transesophageal echocardiogram found a 1.16 cm vegetation attached to the left coronary cusp of aortic valve (Figure 1D, white arrow). Empirical antibiotic treatment with ceftriaxone and vancomycin were prescribed under the diagnosis of infective endocarditis (IE). Two days later, two sets of blood culture yielded methicillin-susceptible Staphylococcus aureus. However, the signs

Figure 1. (A) Janeway lesion—several non-tender erythematous nodular lesions on the fingers (black arrow), (B) Osler’s nodule—one tender hemorrhagic macular lesion on the toe (white arrow), (C) Computed tomography of abdomen disclosed multiple septic embolisms in liver, spleen and bilateral kidneys (white arrows), (D) transesophageal echocardiogram found a 1.16 cm vegetation attached to the left coronary cusp of aortic valve (white arrow).
and symptoms of heart failure and unstable hemodynamic status developed. Therefore, he received aortic valve replacement and further antibiotic treatment with oxacillin. The postoperative course was smooth, and he was discharged uneventfully one month later.

IE is not easy to identify, and its diagnosis requires a thorough physical examination. Janeway lesion, Osler’s nodule, and Roth spots are some specific features for IE. Occasionally, the formation of septic embolism can spread to other organs, and may cause renal infarct, splenic infarct or focal neurologic deficit. Herein, we present a typical case of IE with characteristic physical findings and some complications. Although the clinical manifestations of IE are protean, clinicians should keep alert in the specific stigmata of IE.

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