

00864 Diagnosis of infective endocarditis: does the number of embolised areas help?

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Background: Infective endocarditis (IE) remains an important diagnostic challenge due to the complexity of the clinical presentations. The aim of the present study was to determine if the number of embolized areas on admission was predictive of IE among patients with a clinical suspicion.

Materials/methods: This prospective observational study included all cases admitted for suspected IE during a nine-month period (January to September 2018) at the University Hospital of Lausanne, Switzerland. IE was defined according to modified criteria of 2015 European Society of Cardiology Guidelines. Patients with definite IE (cases) were compared to patients with possible or rejected IE (controls).

Results: Among 172 patients with suspected IE, 43 (25.0%) were categorized as definite IE (8 with pathological criteria and 35 with clinical criteria), 61 (35.5%) as possible and 68 (39.5%) were rejected. The majority of patients (113, 65.7%) had positive blood cultures (40, 93.0% among cases vs 43, 35.7% among controls $P<0.001$). Most commonly isolated pathogens included *Staphylococcus aureus* (50, 44.2%), *Streptococcus* spp. (26, 23.0%) and *Enterococcus* spp. (14, 12.4%). Forty-three patients had a positive imaging (34, 79.1% vs 9, 7.0%; $P<0.001$). No difference was found on fever occurrence. Seventy-six patients had a predisposing condition (34, 79.1% vs 42, 32.6%; $P<0.001$). Immunologic criterion was present among six patients (5, 7.9% vs 1, 0.9%; $P<0.001$). Embolization was more frequent among cases (30, 69.8% vs 35, 27.1%; $P<0.001$). Among those 65 patients (Table), embolization in two or more body areas was more frequent ($P 0.037$) among cases (15, 50.0%) than in controls (8, 22.9%) corresponding to a relative risk of 2.3 (95% CI 1.3-4.1).

Conclusions: One third of suspected cases in our hospital were diagnosed with IE. *Staphylococcus aureus* remains the most commonly isolated pathogens. The number of different areas embolized can aid in the diagnosis of IE.

Body areas	Controls (35)	Cases (30)
Central nervous system	9(25.7%)	15(50.0%)
Lungs	6(17.1%)	6(20.0%)
Intraperitoneal organs	4(11.4%)	2(6.7%)
Extraperitoneal organs	2(5.7%)	1(3.3%)
Upper right limb	3(8.6%)	9(30.0%)
Upper left limb	2(5.7%)	6(20.0%)
Lower right limb	4(11.4%)	6(20.0%)
Lower left limb	7(20.0%)	4(13.3%)
Spine	5(14.3%)	9(30.0%)

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