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Letter to the Editor

Delayed management of *Staphyloccocus aureus* infective endocarditis in a Middle East respiratory syndrome coronavirus possible case hospitalized in 2015 in Paris, France

*Dear Sir,*

The risk of emerging infectious diseases such as Middle East respiratory syndrome coronavirus (MERS-CoV) [1] and Ebola epidemics is growing not only as the result of changes in demographic, anthropological, ecological and economic conditions but also because of increasing connectedness and speed of movement in the modern world. In response to the risk of hospital transmission to healthcare workers and other patients, maximum precautions in isolation wards aim to limit transmission.

Infection due to MERS-CoV [2] was identified in 2012, and has been responsible for 1733 confirmed cases and 628 deaths to date [3]. In France, since 2012, 1524 patients were classified as possible cases, two were confirmed as MERS-CoV infection, of which one died [4].

Maximum precautions to avoid cross-transmission to healthcare workers may alter the management and care of other life-threatening infectious diseases. It is of particular importance given the ratio between the number of cases of emerging infectious diseases and the number of ‘classical’ infections.

A man in his sixties with possible MERS-CoV was admitted to our infectious disease department at Bichat Claude Bernard Hospital in Paris in 2016. He lived in the United Arab Emirates and had returned to France for a holiday 5 days before admission. Fever had appeared 3 days earlier. He was initiated on amoxicillin by a general practitioner 2 days before. He was admitted to the emergency department by an infective endocarditis. Eight hours later (H20), blood cultures were positive for *Staphyloccocus aureus* with negative mecA geneXpert. Trans-thoracic and transoesophageal echocardiographs revealed a mobile echogenic mass of 10 mm on the cardiac valve, along with a thickened posterior ring. Screening for septic embolism showed a cerebral ischaemic and haemorrhagic stroke and fungal aneurysm on the left femoral artery. Surgical intervention was performed on day 10 of antibiotic initiation. Surgery was followed with diaphragmatic rupture in the pericardia, and retroperitoneal bleeding. After 17 days in the intensive care unit the patient died.

This case illustrates the difficulty of managing patients with suspected highly contagious emerging infectious diseases. A final diagnosis of MERS-CoV requires the exclusion of all other diagnoses [3]. But the diagnosis of MERS-CoV infection should be considered in a patient returning from epidemic countries with non-specific symptoms.

Here, the suspicion of MERS-CoV led to a 12-hour delay in performing blood cultures because of isolation. Clinicians did not start antibiotic therapy as quickly as they should. French guidelines for laboratory biosafety in the case of MERS-CoV suspicion should be discussed again and probably modified. There has been no new MERS-CoV infection in France since 2012 and these restrictions are more stringent than the WHO guidelines. Suspicion of an emerging infection should not paralyse the clinician to the detriment of the individual in his search for alternative diagnoses.

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