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Letters to the Editor

Sixth case of infective endocarditis caused by *Gemella bergeri*



Dear Editor,

A 50-year-old man was admitted to our hospital with high fever (up to 39 °C) accompanied by shivering in the past two weeks refractory to common oral antibiotics. His medical history was significant only for bicuspid aortic valve (BAV). At admission, the leukocyte count was 13,000/mm³, 82% neutrophils, C-reactive protein 23.6 mg/dL, erythrocyte sedimentation rate 79 mm/h; ortho-panoramic and chest radiograph was unremarkable, as well as abdominal ultrasound. Transthoracic echocardiogram was performed showing a mobile vegetation attached to the anterior cusp of the aortic valve. The patient was diagnosed with acute infective endocarditis and, awaiting blood culture results, commenced on intravenous amoxicilline-clavulanate associated with amikacin. Temperature did not subside on these antibiotics. However, *Gemella bergeri* was isolated from blood cultures and therapy switched to ceftriaxone 2 g/day plus gentamicin 240 mg/day according to antibiogram results. The patient became apyrexial on this antibiotic therapy, which was prescribed for one month.

G. bergeri (or *bergeriae*, named after microbiologist Ulrich Berger) is one of the six species belonging to the genus *Gemella*, a family of gram-positive cocci arranged in pairs which composes the normal flora of the oral cavity, digestive and urinary tract and can rarely affect these systems. It was isolated for the first time by Collins et al. in 1998 from blood cultures of six febrile patients, three of whom were diagnosed with endocarditis.¹ Since then, only five cases of *G. bergeri* endocarditis have been reported so far.¹⁻³ Heart abnormality seems to be the most predisposing risk factor as it was described in three patients with mitral valve prolapse, tetralogy of Fallot, and BAV: this last condition was also present in our patient.¹⁻³ Molecular diagnosis using 16S rRNA gene sequence analysis is the method of choice to confirm the diagnosis of

G. bergeri endocarditis especially in culture-negative cases.¹⁻³ Intravenous gentamicin and ceftriaxone and oral rifampin are the antibiotics most frequently prescribed to treat this infective disease.¹⁻³

Conflicts of interest

The authors declare no conflicts of interest.

REFERENCES

- Collins MD, Hutson RA, Falsen E, Sjöden B, Facklam RR. *Gemella bergeriae* sp. nov., isolated from human clinical specimens. *J Clin Microbiol.* 1998;36(5):1290-3.
- Logan LK, Zheng X, Shulman ST. *Gemella bergeriae* endocarditis in a boy. *Pediatr Infect Dis J.* 2008;27(2):184-6.
- Elsayed S, Zhang K. *Gemella bergeriae* endocarditis diagnosed by sequencing of rRNA genes in heart valve tissue. *J Clin Microbiol.* 2004;42(10):4897-900.

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