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Letter to the Editor

Favourable outcome of *Streptococcus agalactiae* prosthetic valve endocarditis after conservative treatment

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The incidence of invasive infection caused by *Streptococcus agalactiae* has increased during past years in non-pregnant adult patients, especially if affected by immunosuppressive diseases or underlying chronic disease [1,2]. Infective endocarditis caused by *S. agalactiae* carries an unfavourable prognosis leading some authors to suggest early cardiac surgery [3]. Although this organism is often highly susceptible to penicillin, mortality rate is high with an overall mortality of 42.9% in native valves [4] and 90% in prosthetic valves [5]. We describe the case of a 76-year-old female with aortic prosthetic valve infective endocarditis due to *S. agalactiae*, which resolved with conservative treatment only.

A 76-year-old woman was admitted following fever, peak value 39.7 °C, of 2 days duration with shivers, cough, general malaise, headache, vomit, nausea and a large erysipelas lesion in her left leg. In 1997 she had undergone cardiac surgery with aortic valve replacement for aortic stenosis. Several episodes of fever and general malaise occurred in the two precedent months. All episodes resolved with few days of oral amoxicillin administration. On examination she was well oriented, febrile (38.8 °C), tachycardiac, tachypneic, stable blood pressure with 92% oxygen saturation on room air. She denied neck, abdominal pain, and neurological examination was completely normal. Cardiovascular examination was unremarkable except for prosthetic second heart sound. Biochemical examination revealed white blood cell count of 19,870/mm^3 with 83% polymorphonuclear leukocytes. The day of admission 3 successive blood cultures had been taken and ceftriaxone 1 g 12-hourly was given as empirical therapy. Three days after admission blood cultures resulted positive for *S. agalactiae*, identified by Lancefield serology grouping. The minimum inhibitory concentration of Ampicillin was <0.25 μg/ml. On transesophageal echocardiography (TEE) two thin and floating vegetation attached to the aortic annulus were found without demonstration of prosthetic valve malfunction (Fig. 1). Intravenous Ampicillin infusion was given for 6 weeks at a dosage of 12 g/day and gentamycin for the first 2 weeks at a dosage of 80 mg 12 hourly. Her clinical symptoms improved markedly and signs of active infection disappeared. After 6 weeks of therapy a TEE revealed

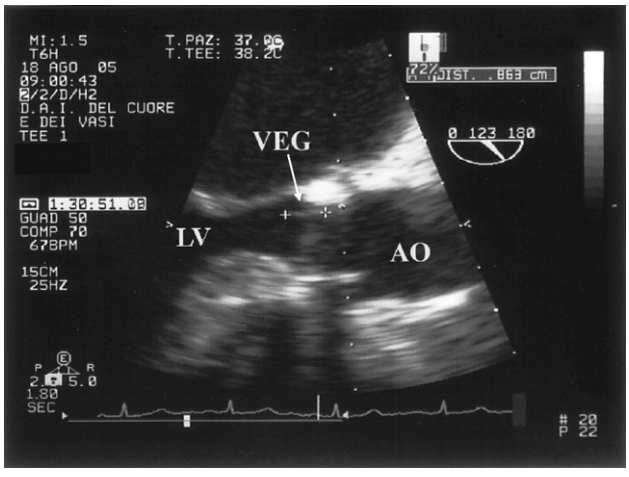

Fig. 1. Echocardiographic transesophageal image. Elongated mobile vegetation attached to the aortic annulus is presented. Abbreviations: LV — left ventricle, AO — aorta, VEG — vegetation.

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disappearance of vegetation and three blood cultures resulted negative. The patient was discharge in stable condition. At 1 month follow up recurrent emocultures were negative without evidence of vegetation on TEE.

Other authors have reported a favorable outcome of infective native valve endocarditis due to *S. agalactiae* treated with a conservative approach in a patient with a sistemic embolisation [6]. This is the first case report of infective endocarditis on prosthetic valve due to *S. agalactiae* which resolved with conservative treatment only. Risk factors of our patient for acquiring systemic *S. agalactiae* infection were two: age and erysipelas superimposed on chronic lynfedema [7]. We started antibiotic therapy within the first 12 h from hospitalization and we prolonged, as currently recommended, ampicillin for 6 weeks and gentamicin for the first 2 weeks. In the absence of any specific guidelines for the treatment of patients with endocarditis due to *S. agalactiae*, we opted for a medical treatment because the patient did not meet any criteria for surgical treatment as reported by other authors for highly aggressive agents [8]. At discharge we recommended good skin hygiene and prophylactic use of penicillina benzathine (12 million units) to prevent recurrent erysipelas. The favourable outcome in our patient suggest that a conservative treatment can be effective, if there are no valve destruction or major systemic complication, using intensive, appropriate and most of all early antibiotic therapy.

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