

a fever of 39°C and macroscopic pyuria. Physical examination revealed an aortic ejection systolic murmur. The white blood cell count was  $15 \times 10^9/l$  with 88% neutrophils and the C-reactive protein 71 mg/l ( $<5$  mg/l). Urine microscopy showed a large number of leukocytes and bacteriuria. Urine culture was positive for *Escherichia coli* and the first two sets of blood cultures (both aerobic and anaerobic) were initially positive for *Escherichia coli* and two days later for *Lactobacillus* species also. We considered *Lactobacillus* to be a contaminant. Diagnosis of urinary tract infection with bacteraemia was presumed and ceftriaxone treatment introduced.

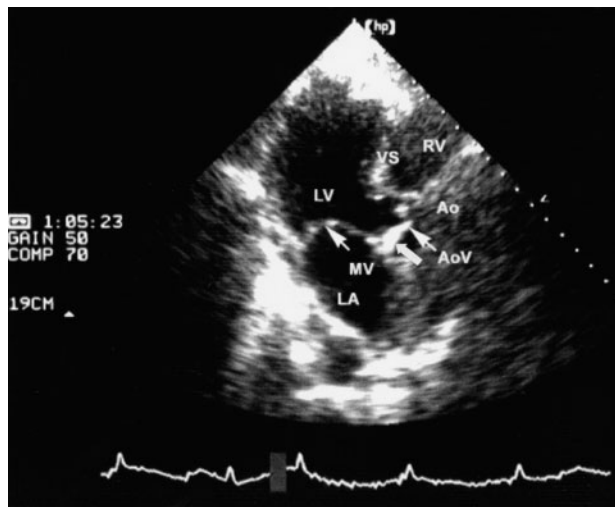
After seven days, as the patient's condition did not improve, a second set of blood cultures (3 bottles) was still positive for a *Lactobacillus* species. Transthoracic echocardiogram showed a thickened non-coronary cusp of the aortic valve consistent with infectious endocarditis (Figure 1). According to the modified Duke's criteria we subsequently made a diagnosis of an aortic valve *Lactobacillus* endocarditis [3]. We changed antibiotic therapy to penicillin G plus gentamicin intravenously, with subsequent improvement of symptoms and regression of fever. After 19 days of treatment, gentamicin was stopped because of renal failure, and penicillin was interrupted at day 27 because of a skin rash. Clindamycin was subsequently administered intravenously for another 3 weeks and the patient improved.

*Lactobacillus* was first described as a heart pathogen in 1938 by Marschall *et al.* [4]. As part of the human flora, it is usually considered as non-pathogenic. In some situations, however, it is responsible for bacteraemia, urinary tract infection, dental caries, pelvic infections, intra-abdominal or liver abscesses, meningitis, pneumonia and also endocarditis [5, 6]. In a laboratory-based

### Endocarditis in older people

SIR—*Lactobacillus* is a commensal anaerobic gram-positive rod found in the mouth, genitourinary and gastrointestinal tract [1]. To date, only three cases of *Lactobacillus* endocarditis have been described in immunocompromised patients [2]. We describe an 82-year-old patient with *Lactobacillus* endocarditis.

This man was admitted to the Geriatric Department of the University Hospital in Geneva with weight loss and gastrointestinal dysfunction. He was found to have



**Figure 1.** Cardiac apical long axis view. LV, left ventricle; MV, mitral valve; RV, right ventricle; VS, ventricular septum; LA, left atrium; AoV, thickened aortic valve; Ao, aorta. Broad arrow: Thickened non-coronary cusp of the aortic valve.

## Letters to the Editor

series, 39% (15/38 isolates) of *Lactobacillus* isolates were documented with clinically significant infection [7]. Therefore, *Lactobacillus* in blood cultures should always alert clinicians to a clinically significant bacteraemia [8]. The pathogen itself is not very virulent and the prognosis of bacteraemia itself is favourable, but as it is often diagnosed in patients with severe underlying illnesses, it is a marker of frailty [9]. Only 3 cases of *Lactobacillus* endocarditis were reported in older patients between 1983 and 2000 [10–12].

Antibiotic treatment is somewhat difficult in elderly subjects because standard therapy with aminoglycoside and penicillin may lead to complications such as renal insufficiency. Cephalosporins or vancomycin are not appropriate alternative antimicrobial agents because of frequent resistance problems [5–13]. In contrast, clindamycin shows *in vitro* sensitivities with a favourable profile and can be used as an effective alternative drug when other treatments fail [14]. Nevertheless, in spite of appropriate treatment, prognosis of *Lactobacillus* endocarditis is poor and post-infection need for valve-replacement is quite frequent [12].

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