Hypopotassaemia can be present in hiperaldosteronism and rennin-producing tumours, Bartter's syndrome[2] and Gitelman's syndrome.[3]

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Septic shock caused by *Streptococcus bovis* in a haemodialysis patient

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Dear Editor:

In patients with chronic renal failure in substitutive treatment, cardiovascular pathology is assumed to be the primary cause of morbi-mortality, followed by infection.[1] Hypoalbuminaemia, catheter holders and other factors predispose these patients to infections which are much more serious than in the general population.[2]

Streptococcus bovis is a Lancefield group D streptococcus which has properties in common with enterococcus and some streptococci of the *Viridans* group, although it differs from these in habitat and clinical significance. It is usually found in bovine livestock intestine and can contaminate through faeces, water and food of animal origin.[3] As a human pathogen, it gives rise to bacteremia and endocarditis, particularly in elderly patients with chronic disease. It is associated with adenoma, colorectal carcinoma and liver disease; it therefore appears to be related to the habitual point of entry for bacteria: the gastrointestinal system.[4]

Streptococcal peritonitis has been described in patients in substitutive treatment with peritoneal dialysis; however, the *Viridans* group is more common.[5]

We describe the case of a 77 year old patient suffering from terminal chronic renal failure as a result of probable nephrosclerosis, who had started periodical haemodialysis four years earlier, with significant associated comorbidity: myocardial ischaemia, aneurysm of the abdominal aorta subject to intervention ten years previously and HCV-positive antibodies. Splenectomised for thrombocytopenic purpura since the age of 60. Three months prior to admission the patient presented with gastroenteritis with fever after ingesting shellfish (oysters) which required hydration and was treated with ciprofloxacin.

Having previously been well and having eaten out twice that day, the patient attended at dawn, presenting with elevated fever and general ill health. After taking blood cultures and a basic laboratory test, empirical treatment with cefotaxime and gentamicin was started. Pancytopenia was detected, which had not been present four days previously at the monthly checkup. A session of haemodialysis was required for hyperpotassaemia. Hypotension persisted despite vasoactive drugs, and the patient died within hours.

Streptococcus bovis was later isolated in the blood culture.

We were struck by the speed of the condition's progress in a patient who had been in a good clinical situation beforehand.

The HCV-positive serology and the previous gastroenteritis were possible predisposing factors in the appearance of streptococcus-induced bacteremia. Given that no autopsy was performed, we cannot know if valvular lesions (endocarditis) or lesions on the prosthetic aorta were present, or if organic intestinal pathology existed.

Faced with bacteremia in patients with renal failure which also presents liver or intestinal disease, we should consider the possibility of *Streptococcus bovis* and begin early treatment with penicillin or vancomycin. A speedy introduction of specific antibiotic therapy is fundamental in avoiding the onset of septic shock, which in our case had a fatal outcome in a few hours.

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