

monares, cutáneas y del sistema nervioso central. Los factores de riesgo predisponentes son: corticoterapia prolongada, trasplante de órgano sólido y precursores hematopoyéticos, procesos neoplásicos, infección por VIH, abuso de drogas por vía parenteral y existencia de enfermedad pulmonar de base. La nocardemia es más frecuente en varones, con una relación 3:1⁹.

En este caso se sospechó una diseminación hematológica desde un foco pulmonar facilitada por el estado de inmunosupresión del paciente, consecuencia del tratamiento profiláctico postrasplante y la corticoterapia intravenosa prolongada.

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Native valve endocarditis caused by *Kocuria kristinae*



Endocarditis sobre válvula nativa por *Kocuria kristinae*

We report a 56-year-old man with aortic-bifemoral bypass surgery secondary to Leriche's syndrome, three years ago. One year after, he presented myocardial infarct that required primary percutaneous coronary intervention with stent in right coronary artery. The patient was admitted due to one month of fever, with chills and profuse sweating. Two weeks after the fever started, the patient had autolimited haematuria without micturitional pain. Physical examination was significant for bad oral hygiene with several dental decays. Cervical adenopathies lower than 1 cm of diameter, painful and soft were present. Cardiopulmonary auscultation was normal. Blood pressure was 140/72 mmHg and temperature 39.5 °C. Relevant laboratory data were white cell count 10,900/ μ L (with 79% neutrophils, 14.1% lymphocytes), haemoglobin 13.4 g/dL, platelet count 184,000/ μ L, plasma sodium 133 mEq/L, potassium 4.2 mEq/L, fasting glucose 94 mg/dL, and creatinine 1.1 mg/dL. Liver enzymes and bilirubin were normal. Urine analysis demonstrated haematuria without proteinuria or leucocyturia. Electrocardiogram showed sinus rhythm, with heart rate of 88/min. Chest radiography was compatible with chronic obstructive pulmonary disease. A transthoracic echocardiograph evidenced two vegetations in aortic valves, without paravalvular abscess. A transoesophageal echocardiograph confirms it, with minimal aortic insufficiency, and normal rest valves. Vegetations size of one was 2 cm and the other was 1.2 cm. A thorax-abdominal-pelvic CT did not demonstrate embolism or findings compatible with prosthesis vascular infection.

Gram-positive bacteria were isolated in three blood cultures, identified initially as *Micrococcus* spp., but finally the microorganism was identified as *Kocuria kristinae* by the Vitek 2 system (Biomerieux, Spain). Confirmation of the final identification of the organism was performed by *K. kristinae* analysis of 16S rDNA sequence.¹ The identification was done by comparing the sequence obtained from the GenBank database using the BLAST program provided by the National Center for Biotechnology Information,

after which the microorganism was identified as *K. kristinae*. The antibiotic susceptibility of the isolate was performed using the automatic Wider[®] System (Fco Soria Melguizo, Madrid, Spain) to obtain, following the CLSI breakpoints relative to *Staphylococcus aureus*, these profiles: Penicillin S, amoxicillin S, oxacillin S, amoxicillin/Ac clavulanic S, ceftazidime S, cefotaxime S, ceftriaxone S, Vancomycin S, teicoplanin S, gentamicin S, amikacin S, eritromycin S, Clindamycin S, ciprofloxacin S, Cotrimoxazol S, fosfomicin S, rifampicin S.

The patient was initially treated with cloxacillin 2 g every 6 h for two weeks, followed by 1 g oral amoxicillin which was prescribed every 8 h to complete the month. Two months later, echocardiograph demonstrated normal valves.

Kocuria is a member of the *Micrococcaceae* family and was previously classified into the genus of *Micrococcus* spp., but in recent taxonomic revision it was dissected from *Micrococcus* spp. based on phylogenetic and chemotaxonomic analysis.² *Kocuria* are strictly aerobic gram-positive bacteria, that may colonize the skin, oropharynx and others mucosae. These strains have been isolated from different clinical specimens, although their clinical relevance is questionable. Misidentification of coagulase negative staphylococcus as *Kocuria* using standard biochemical analysis is common due to phenotypic variability. The identification of micrococci isolated from clinical specimens is often cumbersome for the laboratory, and the clinical interpretation of positive results may be misleading. In fact, these microorganisms are often not correctly identified or hastily discarded as contaminants.^{3,4} *Kocuria kristinae* is isolated frequently in sausages and other meat products, participating, along with other microorganisms in the ripening thereof.

To review the spectrum of clinical diseases caused by *K. kristinae* in humans, we performed a Medline search using the terms "*Micrococcus kristinae*" and "*Kocuria*." Infection due to *Kocuria* spp. is excessively rare. So, infection due to *Kocuria kristinae* has only been reported in two cases: a patient with ovarian cancer and catheter-related bacteremia⁵ and an acute lithiasic cholecystitis.⁶ There is other case of catheter-related bacteraemia due to *Kocuria rosea*, in stem cell transplantation,⁷ and other one with a ventriculoatrial shunt bacteraemia by *Kocuria varians*.⁸

With regard to endocardial infections, only *Kocuria sedentarius* has been described after prosthetic valve surgery,⁹ whereas we were unable to find published studies on systemic infections caused by *Kocuria kristinae*.

We describe the first case of *Kocuria kristinae* infection associated with native valve endocarditis, and it expands the clinical spectrum of infections caused by this group of bacteria, and the significance of their isolation from clinical specimens cannot be underestimated.

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