

TITLE: REPORT OF THE ISOLATION OF *Kocuria marina* IN PATIENT WITH COMPLEX WOUND IN A CITY OF SOUTH OF MINAS GERAIS

AUTHORS: LEMES, R.M.L.; DINIZ, I.F.; Pinto, R.A.F.O.; SOARES, V.S.; SOUZA, A.C.

INSTITUTION: UNIVERSIDADE FEDERAL DE ALFENAS, ALFENAS, MG (RUA GABRIEL MONTEIRO DA SILVA, 700 CENTRO, CEP 37130- 001, ALFENAS – MG, BRASIL)

ABSTRACT:

Kocuria marina is a Gram positive coccus, initially isolated from marine sediments, with a morphology similar to *Staphylococcus*, and belonging to the Family Micrococcaceae. *Kocuria marina* was identified through molecular biology using 16S rRNA. This bacterium is erroneously identified in clinical microbiology laboratories as coagulase negative *Staphylococcus* based on Gram stain, catalase positive and coagulase negative. It shows high biochemical similarity with *Staphylococcus epidermidis*. The clinical significance of these bacteria in humans warrants caution as it does not necessarily confirm infection because of its presence in the normal flora of the skin and mucous membranes in humans and animals. Clinical cases are increasingly described involving elderly and young people with health complications and were mainly associated with the use of catheters. *Kocuria marina* was also recently isolated from the lung tissues of a wild urban rat, adding a zoonotic dimension in the transmission cycle. We present here the report of the first case of isolation of *Kocuria marina* in a patient from the south of Minas Gerais. Female patient, 71 years old, diabetic, non-smoker, non-alcoholic, sedentary; presented a single traumatic lesion in the right leg, with time less than 6 months. She used previous antibiotics (not at the time of collection), and her caregiver performed daily dressing changes. The isolated microorganism was identified as *S. epidermidis* by biochemical tests, showed resistance to oxacillin, penicillin, ampicillin, azithromycin and erythromycin, and sensitivity to sulfamethoxazole + trimethoprim, vancomycin, teicoplanine, novobiocin and chloramphenicol. When we identified the strain through MALDI-TOF, it was identified as *Kocuria marina*. This fact draws attention to the need for clinical microbiologists to correctly identify this bacterium and to investigate its factors associated with virulence and susceptibility profile.

Keywords: biochemical tests; *Kocuria marina*; MALDI-TOF; *Staphylococcus epidermidis*