

Kocuria Cristinae - A Case Report from an Osteomyelitis Patient

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Abstract: *Kocuria kristinae* is a rare but multidrug resistant organism belonging to Micrococcaceae family. It is a gram positive coccus and usually a skin commensal, but, in immunocompromised and those with co-morbid conditions it often presents as fulminant infection. We isolated the organism from the sample of a chronic alcoholic with osteomyelitis. The organism grew well on Macconkey and Blood Agar plates and responded well to teicoplanin.

Keywords: Multidrug resistant, immunocompromised

1. Introduction

Kocuria kristinae, formerly known as *Micrococcus kristinae* is a gram positive bacteria first isolated from the rhizoplane of the *Typha angustifolia*. *Kocuria* is a commensal in skin and oral cavity but it can be pathogenic in immune-compromised hosts.

We present a case where *K. Kristinae* was isolated from the pus of a 48 year old male patient who presented with fracture hip, a prolonged repair of around 150 minutes was carried out. The wound got infected which was subsequently washed and debrided. The patient was a chronic alcoholic and was in withdrawal at that time. Serum proteins were also low. The patient received Teicoplanin for three weeks and underwent complete recovery.

2. Case History

The initial sample we received was pus, which was subjected to Grams stain which showed gram positive cocci, arranged in tetrads and occasional pairs. The sample was cultured on Macconkey and Blood agar plates at 37 degrees aerobically and the culture showed pink, non lactose fermenting and creamish-white, opaque, non haemolytic colonies respectively which was 0.5-1.5mm convex, with complete edges and round margins. They were catalase positive and coagulase negative. The species identification was done using Vitek 2 compact. Subsequently the debrided tissue was also processed and showed similar findings. Antibiotic susceptibility testing was done and the sample was sensitive for vancomycin, teicoplanin, linezolid and rifampicin. The patient was on teicoplanin for three weeks and responded well.

3. Discussion

Osteomyelitis caused by *Kocuria* species requires laboratory testing for diagnosis, and isolation of the organism from debrided tissue and aspirated pus constitutes the confirmatory test for the disease.

Infections in humans caused by *Kocuria* species have included bacteremia related to a central venous catheter, cholecystitis, brain abscess, endocarditis, synovitis, periarticular bursitis, and of course, peritonitis in PD patients but only a few of them have been reported. Being an

opportunistic infection the organisms shows susceptibility only to selected drugs and thus correct susceptibility pattern becomes a necessity. Being common among immunocompromised individuals the organism usually presents as a fulminant infection.

References

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Figures



Figure 1: Colony on Blood Agar Plate

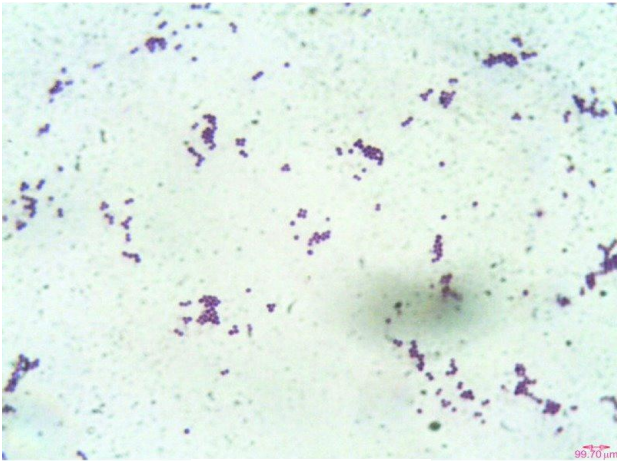


Figure 2: Grams stain