

# infectio

### **CARTAS AL EDITOR**

## Is it really Kocuria kristinae?

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#### Es realmente Kocuria kristinae?

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Sir.

We read with interest the case report "Endocarditis bacteriana por *Kocuria kristinae* en un paciente inmunocompetente. Reporte de caso" by S.M. Rojas Molina, *et al*<sup>1</sup>. The authors described about the *Kocuria kristinae* endocarditis in an immunocompetent woman. We agree that *Kocuria kristinae* is a rare organism and endocarditis caused by this organism is worth mentioning. However, there are certain questionable points in the report which we would wish to highlight and which need clarification.

Since the whole report is based on the microbiological aspect, specifications of the microbiological techniques used for identification of the isolate are needed for better clarity. How many blood culture sets were ordered? How many cultures were done? Did all the cultures grow the same organism?

In discussion part, the authors mentioned Vitek2 as the method used for the identification but what was the method used for confirmatory identity of the organism to label it as *Kocuria kristinae*? Even though, the new GP Vitek2 cards may have improved identification database but as stated by Ben Ami and Carmelli in their reply<sup>2,3</sup>, we too underscore the uncertainity of Vitek2 system in accurate identification of *Kocuria spp*. Here, we would like to share our experience for more support. In our laboratory, recently *Kocuria spp*. was identified by the Vitek2 system in two endocarditis cases, which were sent for repeat identification by MALDI-TOF MS. In one case, the organism was identified as *Coagulase negative Staphylococci* and in the other as *Streptococcus viridans*. MALDI-TOF MS, based on proteomics, nowadays is considered as a state-of-the-art identification method and is considered

as more reliable than Vitek2 which is based on biochemical reactions. With such incidences of discordant results, we recommend confirmatory method of 16S gene sequencing for all isolates identified as *Kocuria spp.*by Vitek2 system.

Kocuria in itself is a rare organism with no antimicrobial sensitivity guidelines as of now, hence sensitivity profile of the isolate as such may or may not be taken as a method for preliminary identification of the organism, remains to be determined.

In conclusion, we suggest confirmatory identification by gene sequencing methods for any isolate identified as *Kocuria spp*. by Vitek2 system. This would prevent misidentifications as well as over-reporting of rare *Kocuria kristinae* cases especially in endocarditis infections.

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### References

- S.M. Rojas-Molina, et al. Endocarditis bacteriana por Kocuria kristinae en un paciente inmunocompetente. Reporte de caso. Infectio 2019; 23(4): 399-401 http://dx.doi.org/10.22354/in.v23i4.809
- Ben-Ami R, Navon-Venezia S, Schwartz D, Schlezinger Y, Mekuzas Y, Carmeli Y. Erroneous reporting of coagulase-negative staphylococci as Kocuria spp. by the Vitek 2 system. J Clin Microbiol. 2005;43(3):1448-50.
- M. Boudevrijns, J. Vandeven, J. Verhaegen, R. Ben-Ami, and Y. Carmeli, "Vitek 2 automated identification system and Kocuria kristinae," Journal of Clinical Microbiology, vol. 43, no. 11, p. 5832, 2005.
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