

# ACUTE EOSINOPHILIC PNEUMONIA SECONDARY TO DAPTOMYCIN: A CASE REPORT

D. YÁÑEZ FERIA, M.B. CONTRERAS REY, E. SANCHEZ GOMEZ, S. GRUTZMANCHER SAIZ, C. BOCANEGRA MARTIN.  
JUAN RAMON JIMENEZ HOSPITAL, PHARMACY, HUELVA, SPAIN.



Servicio Andaluz de Salud  
CONSEJERÍA DE SALUD

JUAN RAMON JIMENEZ HOSPITAL,  
HUELVA.

5PSQ-042

J01 - Antibacterials for systemic use



## Background

A 81 years old woman was admitted to a surgical cleaning of infect knee prosthesis and the administration of targets antibiotics. After starting with daptomycin, the patient developed an acute eosinophilic pneumonia.

## Purpose

To analyze whether the symptomatology was related to antibiotic treatment and to establish the causality.

## Material and methods

A descriptive observational study design was carried out. The medical history was obtained from the digital clinical history (DIRAYA) and the optimized computerized order entry software from the pharmacy department (APD- PRISMA). A bibliographic research was conducted to find similar cases or if it was an uncommon adverse effect. Modified Karch-Lasagna's algorithm was applied to assess the relationship between the acute eosinophilic pneumonia and daptomycin.

## Results

After the surgical cleaning, fever appeared and the patient started with ceftazidime and linezolid treatment. In the intraoperative culture it was detected a methicillin-resistant *Staphylococcus epidermidis* who showed most sensitivity to daptomycin. After four weeks with daptomycin 6 mg/kg/day, fever and dyspnea appeared. The x-ray study showed bilateral pneumonia with eosinophilia and the patient needed an admission in an intensive care unit moreover. A new culture was obtained and it resulted negative. With the suspicion of an eosinophilic pneumonia and after being consulted the EPAR-Product Information, daptomycin was switched to vancomycin 30 mg/kg/day for the treatment of prosthesis infection, empiric antibiotic therapy was suspended and methylprednisolone was prescribed to treat the eosinophilic pneumonia. Five days later, the patient was discharged with positive synovial fluid cultures and a prescription of a once-weekly dalbavancin. After four weeks of treatment, cultures were negatives. In contrast with notified case series, *Staphylococcus aureus* wasn't the causative strain in our case<sup>1</sup>. Modified Karch-Lasagna's algorithm established a 'probable' relationship between daptomycin and eosinophilic pneumonia. Adverse effect was reported to the local pharmacovigilance centre.

## Conclusion

Our data suggest that daptomycin could provoke the serious adverse effect and prolongation of hospitalization time. Hospital pharmacists must know possible drug adverse effects and establish reporting systems to contribute to an appropriate pharmacotherapy management.

## References and/or Acknowledgements

1.Uppal P, LaPlante KL, Gaitanis MM, Jankowich MD, Ward KE. Daptomycin-induced eosinophilic pneumonia - a systematic review. *Antimicrob Resist & Infect Control* [Internet]. 2016;5(1):55