

## Prosthetic Joint Infection By *Acinetobacter Baumannii* Mdr Treated By Antibiotic Carrier: A Case Report

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### Background

Multi drug resistant germs are a problem of increasing importance given the prevalence of these pathogens. *Acinetobacter baumannii* MDR accounts for 15% of all causes of sepsis in ICU in Italy, with a mortality rate from 28% to 43%. The use of antibiotic carriers makes it possible to overcome the challenges posed by antibiotic penetration into poorly vascularized sites and the need to use potentially toxic drugs to treat resistant microorganisms.

### Case history

A 68-years-old female presents to ED with fever and confusional state. In her medical history she had right hip arthroplasty surgery 2 months earlier. Physical examination reveals two fistulae with purulent drainage from the site of the surgical wound. Wound

swabbing shows positivity for MRSA and *Acinetobacter* MDR. Increased metabolic index in the prosthetic-periprosthetic site in the FDG-PET scan corroborates the hypothesis of a prosthetic joint infection. Systemic therapy with Linezolid 1200 mg die and Cefiderocol 6 mg die is started and the decision is made for surgical reduction and spacer placement. It is also decided to place antibiotic carrier (Stimulan) loaded with Cefiderocol 1 gr during surgery. Two weeks after surgery, the patient is transferred to a rehabilitation facility for the continuation of the rehabilitation process.

### Discussion

The use of Stimulan loaded with Cefiderocol was safe and effective in the treatment of prosthetic joint infection of the hip sustained by *Acinetobacter baumannii* MDR.