INITIAL EXPERIENCE OF THE USE OF CEFIDEROCOL FOR MULTIDRUG RESISTANT INFECTIONS IN A UNIVERSITY HOSPITAL

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WHAT WAS DONE
Recently new antibiotics were introduced in our hospital formulary for treatment of serious infections caused by multi-drug resistant organisms (CRE, ESBL, MDR-PA, CRA-AB). Cefiderocol, thanks to its structure and mechanism of action, may play a unique role for patients who have limited or no alternative treatment options. A retrospective study was performed to collect data of adult patients who received cefiderocol.

WHY WAS DONE
The aim of this study was to describe the first cases of prescriptions of Cefiderocol for use in 5 months, following its access in Italy, and the hospital pharmacist interventions in assisting clinicians from the microbiology step to the safety and appropriate antibiotic treatment.

HOW IT WAS DONE
A standardized prescription form was sent to the infectious disease specialist to collect patient’s characteristics, infection type, reasons for cefiderocol use, doses and duration of treatment (concomitant treatments, adverse events and outcome). A susceptibility testing kit (30 mcg cefiderocol disc) was provided to the microbiology specialist in order to reserve this new antibiotic to patient with cefiderocol susceptible isolates.

WHAT WAS ACHIEVED
A total of 30 patients with mean age of 56 years (23-90) received cefiderocol (9 females, 21 males). Among them, 19 patients were treated in ICUs, with the most common regimen of 2 g tid (n=6), while 3 patients with acute renal failure required a regimen of 750 mg bid. The main sites of infection were:
- respiratory tract (n=16), - urinary tract (n=3), - intra-abdominal (n=4), - bloodstream (n=5).

5 patients had multi-site infections. The duration of therapy was in the range of 6-16 days. The most common pathogens were:
- Acinetobacter Baumannii (n=13), - Klebsiella pneumoniae (n=8), - Pseudomonas aeruginosa (n=10), - Enterobacter (n=5), - Acinetobacter Baumannii (n=13).

10 patients had superinfections. The most concomitant therapy was colistin (9). No severe adverse events were reported. 7 patients with septic shock died.

WHAT IS NEXT
Our study confirms the need of a multidisciplinary team, describing a real life experience of the use of cefiderocol as salvage option in critical patients and providing additional data on its benefit, safety and limits in both empirical and targeted treatment of MDR-GNB infections.

WHAT IS NEXT

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