Material and methods: Observational, retrospective

Patients treated with ceftaroline in the hospital from May-2016 to Sept-2020

Variables: age, sex, indication, dose, microorganism, clinical and microbiological cure, and adverse effects.

RESULTS: 57 patients: 75.4% men, with a median age of 69 years (28-89).

Background and importance: Ceftaroline is approved for the treatment of complicated skin and soft tissue infections (cSSSI), and community-acquired pneumonia (CAP). The most specific aspect of the drug is that it’s a b-lactam with activity against methicillin-resistant Staphylococcus aureus (MRSA). These characteristics mean that a large part of its use in clinical practice is in off-label indications.

Aim and objectives: To determine the use of ceftaroline in the clinical practice of a third-level hospital, its effectiveness and safety.

Indication

<table>
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<tr>
<th>Indication</th>
<th>Empirical</th>
<th>Bacteremia</th>
<th>Endocarditis</th>
<th>Pneumonia</th>
<th>GSI</th>
<th>CNS</th>
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</thead>
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<td>13</td>
<td>14</td>
<td>15</td>
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Microorganism

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>MRSA</th>
<th>MRCONS</th>
<th>MSAS</th>
<th>Streptococcus pneumoniae</th>
<th>MSAS and Streptococcus pneumoniae</th>
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</thead>
<tbody>
<tr>
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<td>15</td>
<td>5</td>
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</table>

Meticillin resistant microorganism: 38/46 patients

Duration of treatment: 7 days (1-42)

Posology

- Bacteremia, endocarditis, CNS infection: 600mg/8h, cSSSI: 600mg/12h.
- Pneumonia: 600 mg/12h in 6/15 and 600mg/8h in 9/15 patients (8 of whom had bacteremia and 1 with concomitant CNS infection).
- Empirical: 600mg/12h in 8 patients and 600mg/8h in 3.

*In 6 patients it was adjusted for Renal function

Adverse Effect (AE)

Thrombopenia in two patients

Conclusion and relevance: Our results suggest that ceftaroline is effective in severe cases of methicillin-resistant gram-positive infections. In most cases, ceftaroline was used in off-label indications. In these cases, higher dosages are being recommended, which are usually prolonged in time, so it is advisable to evaluate the profile of AE.