ANALYSIS OF INHALED COLISTIMETHATE USE IN A THIRD LEVEL HOSPITAL

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Background

The use of inhaled colistimethate in our population guaranteed a good antibacterial coverage in our patients

Purpose

To analyze the use of inhaled colistimethate according to indication and prescribed dose, presence or absence of the infectious agent, as well as its alternation with other therapies. To evaluate the cost of treatment associated to each patient

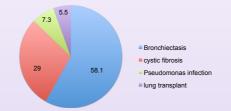
Material and methods

Retrospective 1-year observational study (January 2016-January 2017) of patients treated with inhaled colistimethate. We analyzed indication, prescribed dose, alternation with inhaled tobramycin, presence or absence of infectious agent, concomitant therapy with ciprofloxacin and associated inhalation therapy.

Data were obtained from the Farmatools® outpatients program and from the electronic medical history software Drago AE®. Farmatools® was used to estimate the cost of the treatments.

Results

55 patients were in treatment with colistimethate, of which 58.18% (32) were women. Mean patient age was 51.7 years (6-94)



Considering the isolated microorganism we found these incidence: 78.18% (43) Pseudomonas aeruginosa, 3.63% (2) Pseudomonas aeruginosa and Staphylococcus aureus, 1.81% (1) Pseudomonas aeruginosa and Haemophylus influenzae, 1.81% (1) Pseudomonas aeruginosa and Acinetobacter baumannii, 1.81% (1) Pseudomonas aeruginosa and Mycobacterium avium.We found no isolated microorganism in 7.27% of patients.

12.7% of patients (7) were also treated with inhaled tobramycin, all of them cystic fibrosis- patients.

43,66% of patients (24) were also treated with ciprofloxacin, 10 patients throughout the year (all of them CF patients) and 14 with a mean duration of therapy of 10.5 days. 56.34% of patients (31) did not received ciprofloxacin during their treatment with inhaled colistimethate.

The total cost of colistimethate treatment was 1221.8 € per year . The cost per patient was 2221.4 €/patient/year.

Conclusion

The most frequently isolated microorganism was Pseudomonas aeruginosa, An issue to be evaluated would be the recommendation of ciprofloxacin as an adjuvant to colistimethate in CF, since it was not performed in all cases during the pharmaceutical care process in these patients.

