IMPORTANCE OF PREVIOUS MICROBIAL CULTURES IN CARBAPENEMS USE



Servicio de Farmacia

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Background

✓ Carbapenems are widely used as broad-spectrum antibiotics but in several cases microbiological cultures had not been taken before carpenems use, therefore hindering the down-scaling to targeted therapy.

Objective

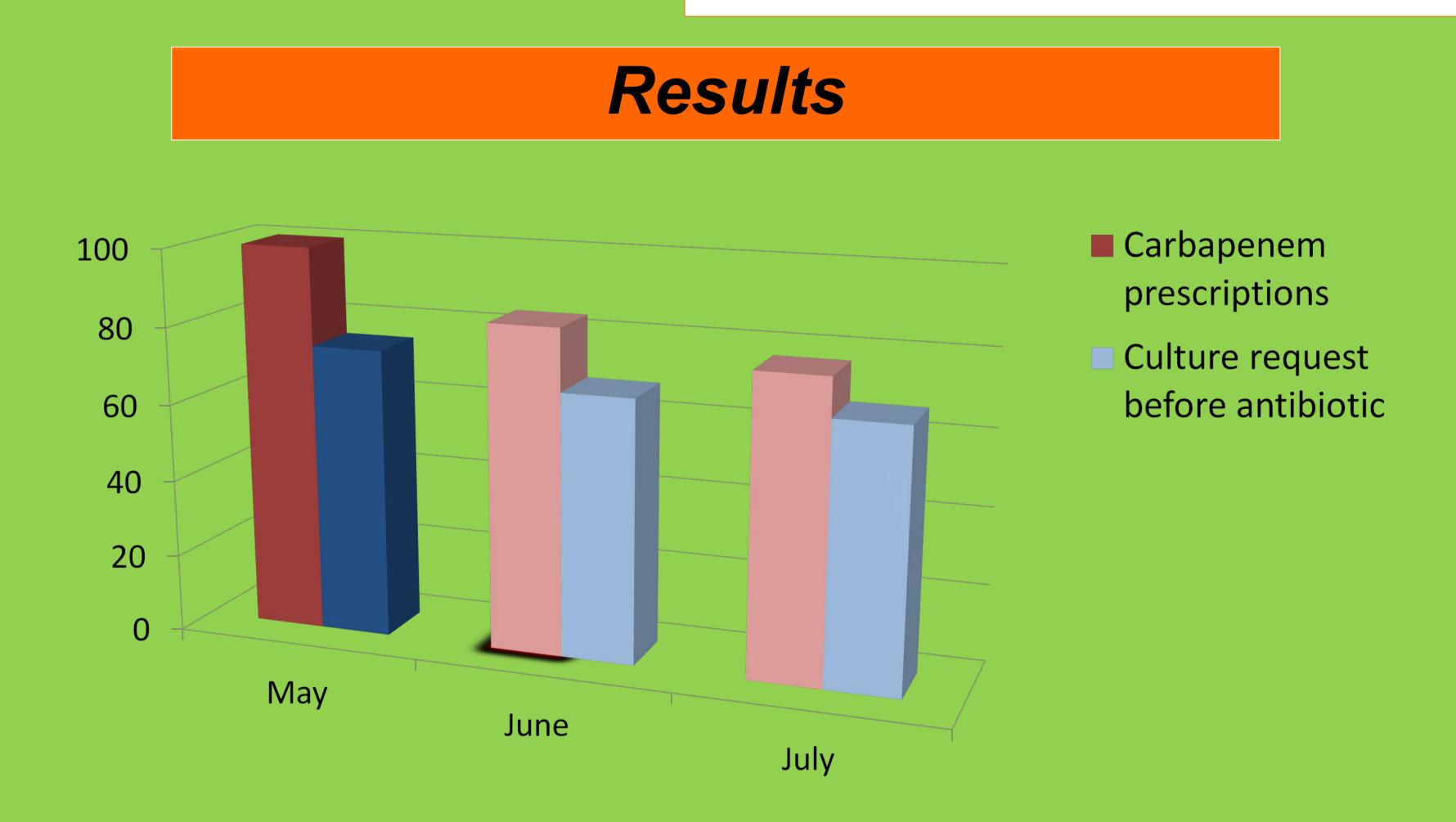
✓ Evaluate the increase in the percentage of the blood cultures requested before carbapenems use because of a pharmaceutical intervention and the results of the cultures to describe if microorganisms are sensible to carbapenems and if its possible to downscale.

Methods

✓ Prospective and interventional study including adults patients using carbapenems.

From June 2014, department of pharmacy set a recommendation saying blood must be taken from the patient for microbiological blood cultures before carbapenem use, and the physicians have to check this recommendation to finish the electronic prescription of a carbapenem.

✓ The record of every patient with carbapenems prescription has been seen for 3 consecutive months, 1 month before and 2 months after the recommendation.



✓ During the study period, 209 blood culture requests were done before carbapenem prescription, 48,3% were negatives, and 52,7% postives. 58,2% of microorganisms isolated were sensitive to carbapenems.

Conclusions

- ✓ The outcome shows a clear improvement in the blood cultures requested by physicians, these allows to optimize antibiotics use facilitating the down-scaling which avoids the appearance of antibiotic resistance.
- ✓ Half of the microorganisms isolated were not sensitive to carbapenems, doing necessary to change the antibiotic, which gives more value to a previous blood culture.

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