ANTIMICROBIALS STEWARDSHIP PROGRAMME FOCUSED ON LONG DURATION TREATMENTS: PRELIMINARY RESULTS

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In 2014, an antimicrobial stewardship program (AMSP) for carbapenems was implemented in our hospital. Due to the good results of this approach, we decided to expand the AMSP in order to review all antimicrobial treatments that lasted more than 21 days.

In this prospective study, 4 months of duration (June to September 2106), we included all admitted patients in a general University Hospital on treatment with the same antibiotic agent for at least 21 days. A multidisciplinary team of antimicrobials experts evaluated each patient’s treatment every day and make a recommendation about this to the responsible physician. The studied variables were: prescribed department, antibiotic, indication of treatment, recommendation and if this recommendation was accepted or not.

BACKGROUND

In 2014, an antimicrobial stewardship program (AMSP) for carbapenems was implemented in our hospital. Due to the good results of this approach, we decided to expand the AMSP in order to review all antimicrobial treatments that lasted more than 21 days.

OBJECTIVE

To describe, analyze and evaluate the AMSP recommendations and the acceptance grade of the long duration antimicrobial treatments.

METHOD

In this prospective study, 4 months of duration (June to September 2106), we included all admitted patients in a general University Hospital on treatment with the same antibiotic agent for at least 21 days. A multidisciplinary team of antimicrobials experts evaluated each patient’s treatment every day and make a recommendation about this to the responsible physician. The studied variables were: prescribed department, antibiotic, indication of treatment, recommendation and if this recommendation was accepted or not.

RESULTS

• We included 54 patients (61 antibiotic treatments). The 54% of the treatments was empiric. The 76,3% of the recommendations were accepted by the responsible physician.

• The most prescribed antibiotics were: third generation cephalosporins (18%), piperacillin-tazobactam (14.7%), quinolones (9,8%) and amoxicillin-clavulanic (9,8%). Medical department prescribed the 70,5% of the antibiotic treatments and his acceptance grade was 79,1%. Surgical department prescribed the 27,9% of treatments (acceptation grade: 58,2%) and intensive care unit prescribed the 1,6% of treatment (100% of recommendations were accepted).

CONCLUSIONS

✓ Three out of four patients, who are on antibiotic treatment for at least 21 days, have an inadequate treatment; In addition, most of the treatments are empiric and broad-spectrum antibiotics. These reasons suggest that this approach, that reduces the duration of antibiotic treatments, also could reduce the incidence of multiresistant bacteria.

✓ The medical department acceptance grade is better than surgical department, where would be necessary additional initiatives in order to improve the acceptance grade (educational or training actions or protocol reviews).