total of isolates x100). The results were presented using the mean and standard deviation (SD) for quantitative data (P-values were determined using Student's *t*-test) and as percentages for qualitative variables (P-values were determined using the Chi-square test). Statistical tests were carried out at the 5% significance level. Data was performed in SPSS. The DDD/1000 patient days were calculated following the methodology of the Anatomical Therapeutic Chemical (ATC)/DDD system 2014.

Results The results show a significant reduction in the consumption of meropenem (90.53 (SD: 26.12) vs 24.96 (SD: 8.80), p<0.001) and imipenem (6.55 (SD: 2.75) vs 2.34 (SD: 1.34); p<0.001) in the intervention period. It is important to note that the carbapenem used in most cases is meropenem, being less frequent than the prescription of imipenem in our field of study. It has also been shown in this period a significant decrease in the resistance of three of the four microorganisms studied: *Klebsiella pneumoniae* (46% vs 38%, p=0.009), *Acinetobacter baumannii* (63% vs 32%, p<0.001) and *Enterobacteriaceae* (18% vs 13%, p<0.001), especially accentuated in the case of *Acinetobacter*. Not so in the case of *Pseudomonas aeruginosa* (17% vs 15%, p=0.422).

Conclusion The antimicrobial stewardship programme, aimed at optimising the prescription of antimicrobial drugs, has proven to be an effective and durable tool in combating increasing bacterial resistance and, at the same time, it has helped reduce the consumption of antimicrobials.

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No conflict of interest.

4CPS-063 IMPACT OF PHARMACEUTICAL CARE IN THE RATIONAL USE OF DAPTOMYCIN

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Background The use of empiric antibiotics more selective than broad-spectrum antibiotics is very frequent, which entails increased resistance in our environment.

Purpose To evaluate the use of daptomycin in patients with suspected infection in complicated skin and soft-tissue infections (IPPBc), infectious endocarditis (EID) by meticilin resistant staphylococcus aureus (MRSA) or bacteremia by MRSA associated with EID or IPPBc.

Material and methods Prospective longitudinal intervention study. We collected data from patients with suspected IPPBc, EID or bacteremia with prescription of daptomycin who started the treatment with daptomycin between November 2017 and September 2018. Variables: age, sex, doses and days of treatment, use, antibiogram and treatment with statins (presenting risk of creatine kinase elevation and rhabdomyolysis). Data were collected using the Farmatools program, electronic prescribing and patient history Selene. The pharmaceutical interventions were perfomed for the improper use of daptomycin and interactions with statins.

Results Eighty-two patients were included (51.22% women, median age: 66.56). Doses of daptomycin: 4–10 mg/kg/day: average of treatment: 10.26 days. Justification of prescribing daptomycin: IPPBc (35.38%), EID (12.20%), bacteremia (51.23%) or others (1.19%). In 67 patients (81.71%) were empirical use, in 14 patients (17.10%) with indication by MRSA and without indication (Espondilocistitis) in one patient (1.19%). In 97.56%, the antibiogram was performed which revealed that 77.5% had no indication of daptomycin. Forty-seven patients changed to another more sensitive antibiotic, whereas 15 patients continued with daptomycin. Twenty patients had concomitant treatment with statins. Thirty-eight pharmaceutical interventions were made: 17 for no indication of daptomycin and 21 for interaction with statins. Of the total, 57.89% were accepted by the doctor (18.18% for no indication, 81.82% for interaction with statins). During the study, 47 patients suspended treatment with daptomycin and 35 patients continued with them (20 with indication, 15 without indication).

Conclusion In most cases, daptomycin was prescribed for empirical use, but the treatment was suspended after the antibiogram. Pharmaceutical interventions have helped to improve the use of daptomycin and contributed to reducing the risk of resistance in our environement. Futhermore, it is important to know the pharmacological interactions when establishing an antibiotic treatment to avoid the occurrence of adverse reactions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-064 EVALUATION OF BROAD-SPECTRUM BETA-LACTAM PRESCRIPTIONS (EXCEPT CARBAPENEMS) IN THE MILITARY HOSPITAL OF INSTRUCTION MOHAMMED V RABAT

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Background The prescription of antibiotics has become one of the most critical acts in hospitals.[1] This is related to the risk of misuse of these drugs and its impact on the development of bacterial resistance and antibiotic inefficiency.

Purpose We aimed to assess broad-spectrum beta-lactam prescriptions (except carbapenems) and the impact of controlled dispensing, antimicrobial management team and antibiotic treatment reassessment in 48–72 hours.

Material and methods This is a descriptive study, which took place on a given day in all hospital units and analysed curative antibiotic broad-spectrum beta-lactam prescriptions. The assessment focused on indication, dosing, combinations, revaluation in 48–72 hours and treatment duration.

Results One-hundred and three prescriptions were identified: amoxicillin (9.70%, n=10), amoxicillin-clavulanic acid (43.69%, n=45), ceftriaxone (33%, n=34), piperacillin-tazobactam (3.88%, n=4), Ceftazidime (7.76%, n=8), and Cefepime (1.94%, n=2). The compliance of the indication, dosage, combinations and re-evaluation at 48–

72 hours was satisfactory, respectively 67.96% (n=70), 81.55% (n=84), 82.75% (24/29 associations) and 65.04% (n=67). The compliance of the treatment duration was only 43.68% (n=45). Controlled dispensing showed interest in total antibiotic treatment duration: 76.69% vs. 34.95% compliance for non-controlled dispensed beta-lactams (p=0.02).

Conclusion The prescription or not of broad-spectrum betalactamines is a multifactorial and complex act, but the compliance regarding the duration of treatment could be improved, in particular by a strengthening of the controls of prescriptions.

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4CPS-065 CLINICAL IMPACT EVALUATION OF IMPLEMENTING ANTIBIOTHERAPY CONTROL OF MORE THAN 7 DAYS

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Background Bacterial resistance is a major preoccupation and the correct use of antibiotics is a global public health priority.[1] The inappropriate use of antibiotics, particularly the increase in duration, can have serious consequences in terms of ecological and pharmaco-economic factors.

Purpose The study aim was to set up a systematic control of antibiotherapy exceeding 7 days by evaluating its impact.

Material and methods From January to June 2018, all curative antibiotherapy up to 7 days have been detected by the pharmacist. The expected treatment durations were all re-evaluated, in consultation with the initial prescriber, according to the clinical situation and the recommendations and data available on treatment durations.

Results A total of 97 antibiotic treatments prescribed for more than 7 days have been re-evaluated. The indications were mainly osteoarticular (n=14), urinary (n=24), pulmonary (n=15), skin and soft tissue (n=18), digestive (n=22) and endocarditis (n=22)=4). The expected duration was justified in 78 cases (80.41%) and could be shortened in 19 cases (19.58%). For the latter, 15 (15.46%) involved urinary tract infections and four (4.12%) pulmonary infections. Prescribers accepted the shorter duration proposal in 17 cases, an acceptance rate of 89.47%. For these patients, the median duration of treatment increased from 14 days (originally planned duration) to 8 days (actual duration). In total, 105 days of antibiotic therapy were saved. Regarding the 17 patients whose duration was shortened after surgery, the clinical course was favourable for all patients and no adverse effects were observed.

Conclusion The establishment of the antibiotherapy control of more than 7 days, by the pharmacist, can make it possible to reduce the duration of treatment and to decrease the frequency of the undesirable effects, without an impact on the clinical evolution of the patients.

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4CPS-066 ADHERENCE OF PATIENTS RECEIVING ANTIBIOTIC THERAPY AFTER HOSPITALISATION

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Background The vast majority of patients (73%) from the septic surgical ward were discharged with a prescribed antibiotic. Because of the specificity of infections, optimal persistence to drug therapy is essential in achieving optimal clinical outcome.

Purpose To map the factors influencing the adherence and to develop a patient information package based on the results.

Material and methods Based upon a standard, three-part questionnaire, discharged patients were telephone-interviewed by a clinical pharmacist. The questions focused on patient's knowledge on therapy, measured the adherence and surveyed side effects. Medicines prescribed for patients were collected from the hospital's medical documentation system. Factors influencing adherence were analysed using statistical methods. Data was aggregated in Microsoft Excel and R programs.

Results Seventy-five patients were discharged from the ward with antibiotic prescriptions between December 2017 and February 2018. Of these, 44 patients were interviewed by telephone and involved in the study. The most frequently prescribed antibiotics were amoxicillin-clavulanic acid (12 cases), cefuroxime (11 cases) and ciprofloxacin (eight cases). Although a significant proportion of respondents (32 patients; 73%) considered it easy to comply with the therapy and believed that they had sufficient information on the prescribed antibiotic, only 23 patients met the criteria of being well informed. Forty-one per cent of respondents used the drug inappropriately in relation to the prescribed dose. Eighteen reported at least one missed dose. After discharge, nine patients did not immediately get the prescribed antibiotics and three patients did not purchase the prescribed drug. Side effects were mentioned by 11 patients, most commonly diarrhoea and abdominal discomfort. Considering optimal drug use, statistically significant differences were found between patients established as well informed and those who were established as inadequately informed (χ^2-test, P-value=0.0144).

Conclusion Taking into account the significant factors revealed, patients' education in their therapy is critical in achieving optimal adherence. Based on the results of the survey, a patient information package was set up on the prescribed antibiotics to provide more efficient and safer medicine use in the patient's home-based therapy.

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