vein (57.3%) followed by the subclavian vein (34.5%), peripherally inserted central catheter (PICC, 7.6%) and femoral vein (0.6%). A total of 143 CVC (27.2%) were removed for suspected BSIs, of which 50.3% were negative. There were 13 colonisations (2.5% of the total), 38 CRB (7.2%) and 20 positive results for central blood cultures without peripheral blood cultures (3.8%), so it was not possible to determine whether it was colonisation or CRB. Regarding location, 54.9% of the infected CVC were jugular, 35.2% subclavian and 9.9% PICC. The overall CRB rate was 6.8. Results by services were: 4.7 in surgery services, 8.2 in the ICU and 11.0 in medical services. *Staphylococcus* was the most common isolate (80.6%) followed by *Escherichia coli* and other gram negative bacteria (9.7%). There were two infections caused by *Acinetobacter* (2.8%) and three caused by *Candida* (4.2%).

Conclusion and relevance Most of CVC had been inserted in the operation room and the most common access was the jugular vein. Half of the removed CVC for suspected BSIs were negative. The CRB rate in our centre could be underestimated because peripheral blood cultures were not extracted in a high number of cases. The microorganisms isolated in this study were similar to those found in the existing literature.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Seisdedos Elcuaz R, Conde García MC, *et al*. Infecciones relacionadas con el CVC en pacientes con NPT. *Nutr Hosp* 2012 June (citado 2019 Sep 08);**27**:775–780.

No conflict of interest.

5PSQ-023 EFFECTIVENESS OF CEFTAZIDIME–AVIBACTAM IN INFECTIONS BY MULTIRESISTANT MICROORGANISMS

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Background and importance The acquisition of resistance by bacteria has meant that new antimicrobials appear. Ceftazidime–avibactam is a restricted antibiotic that is used in multiresistant infections that put the patient's life at risk.

Aim and objectives To evaluate the effectiveness of ceftazidime–avibactam as a treatment for multidrug resistant infections in a third level hospital.

Material and methods This was a before and after study in patients with multidrug resistant infections treated with ceftazidime–avibactam between April 2018 and April 2019. Those <18 years of age and patients who did not have the main study variables were excluded.

The main variable of our study was C reactive protein (CRP) before and after treatment. Secondary variables included age, sex, weight, dosage and isolated microorganism. An initial descriptive analysis was performed with mean (SD) or median (IQR, P25–P75) for numerical variables or absolute frequencies for nominal variables. For statistical analysis, the Wilcoxon test of paired measures was used to determine if there were differences in median CRP values before and after antibiotic treatment. The analyses were performed using the SPSS/PC statistical programme (V.24.0 for Windows, SPSS Inc, Chicago, Illinois, USA).

Results Thirty-six patients were treated with ceftazidime–avibactam from April 2018 to April 2019, of whom 32 were studied. Of these, 21 were men, average age was 63±11 years and average weight was 71±20 kg. The most common dosage was 2 g every 8 hours (25) and the most prevalent microorganism was *Klebsiella pneumoniae* (25).

The median initial CRP was 8.85 mg/dL (1.53–17.27) while the median final CRP was 3.29 mg/dL (0.59–6.78). Statistically significant differences were found in median CRP before and after antibiotic treatment ($z=-3.35$; $p=0.001$).

Conclusion and relevance Ceftazidime–avibactam was found to be effective in patients presenting with multidrug resistant infections as it significantly reduced CRP, a marker used to monitor infections.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-024 PHARMACOLOGIC INTERVENTION BY HOSPITAL PHARMACIST FOR LEUCOPENIA DUE TO TAZOBACTAM/PIPERACILLIN IN THE POSTPARTUM PERIOD: A CASE REPORT

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Background and importance Tazobactam/piperacillin (TAZ/PIPC), indicated for pneumonia and intra-abdominal abscess in Japan, is recommended as a single drug therapy, together with carbapenems, in the guidelines for intra-abdominal infection published by the American College of Surgeons and Surgical Infection Society in 2010 in the USA. There are no reports of leucopenia after treatment with this drug in Japan.

Aim and objectives We observed the case of a postpartum woman who had leucopenia caused by TAZ/PIPC used for intra-abdominal infection. We have reported an improvement in symptoms owing to intervention by the hospital pharmacist.

Material and methods In our hospital, pharmacists are stationed in the maternity ward and share patient information at conferences held in other occupations once a week. A woman had continuous bleeding due to placental abruption after a normal delivery and underwent a total hysterectomy. On day 9, TAZ/PIPC was initiated as *Bacteroides fragilis* was found in a blood culture and was suspected to be causing intra-abdominal infection. A reduced white blood cell count persisted following the start of therapy, with leucopenia reported (1.45×10^9/μL) on day 22. As leucopenia was considered to be caused by TAZ/PIPC, we proposed discontinuation of the drug and the use of meropenem as an alternative. Leucopenia and intra-abdominal infection improved after switching to meropenem. On day 30, meropenem therapy was completed.

Results This patient had leucopenia on day 14 of treatment with TAZ/PIPC and her white blood cell count increased after drug discontinuation. We considered this event an adverse drug reaction caused by TAZ/PIPC, based on a previous report in which patients develop leucopenia, on average, on day 15 of TAZ/PIPC treatment. As the patient was in the postpartum period, we proposed meropenem as an alternative to allow the patient to continue to breast feed, because a lower proportion of this drug is transferred to breast milk.

Conclusion and relevance For patients treated with TAZ/PIPC, hospital pharmacists should be actively involved in the proposal of blood tests and the assessment of test results to avoid serious adverse drug reactions, such as leucopenia.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Macwilliam JL. Piperacillin/tazobactam induced thrombocytopaenia—a delayed response. *BMJ Case Rep* 2012:bcr0320125981.

No conflict of interest.

5PSQ-025 PHARMACEUTICAL INTERVENTION FOR THE OPTIMISATION OF THE USE OF ANTIBIOTICS IN A TERTIARY HOSPITAL

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Background and importance One of the main factors that increases antibiotic pressure and contributes to the development of bacterial resistance is an increase in duration of antibiotic treatment. Strategies to reduce the duration of antibiotic treatment should be implemented when it is not necessary to continue.

Aim and objectives The aim of this study was to systematically review patients with antibiotic prescriptions with a duration of more than 10 days and to analyse the degree of acceptance of the interventions performed.

Material and methods A prospective interventional study was conducted between February and April 2019. Twice a week, all patients receiving antibiotic treatment for >10 days were selected. These patients were analysed by two pharmacists. They checked if the patient needed to continue with antibiotic treatment. To assess the need for antibiotic treatment, they reviewed inflammatory markers (leucocytes and C reactive protein), microbiological cultures and clinical parameters, such as fever and blood pressure values. They also assessed if the patient's clinical situation had improved.

The pharmacist intervention consisted of a message (with a recommendation to suspend treatment, through the electronic prescription programme) sent to the responsible physician, for those patients whose pharmacist considered that it was not necessary to continue antibiotic treatment.

Results A total of 162 patients were selected (55.1% men, median age 66 years). The intervention with a proposal for suspension of treatment was performed in 63 patients. The medical staff accepted 73% (46) of the interventions and 37% (17) were denied. The most prescribed antibiotics were ceftriaxone (20.98%), piperacillin–tazobactam (14.19%), levofloxacin (7.40%) and metronidazole (7.40%). The number of interventions accepted by the services were: surgery 13 (28.2%), pneumology 12 (26.0%), internal medicine 11 (23.9%), digestive 7 (15.2%), oncology 3 (6.5%) and neurology 1 (6.5%).

Conclusion and relevance The review by the pharmacy service of antibiotic treatments longer than 10 days avoided longer durations than necessary, in addition to reducing antibiotic pressure. This is important to decrease adverse effects and prevent the development of bacterial resistance.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-026 IMPACT OF THE EARLY SWITCHING FROM INTRAVENOUS TO ORAL ANTIBIOTICS IN A TERTIARY HOSPITAL

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Background and importance One of the strategies for the rational use of antibiotics is conversion of intravenous antibiotic treatment to oral as soon as possible, without compromising the therapeutic response of the patient. This can reduce the number of possible adverse effects associated with parenteral use and have an economic impact.

Aim and objectives This study was conducted to promote early switching from intravenous to oral treatment in patients who were prescribed parenteral antibiotic treatment for >3 days and to analyse the degree of acceptance of the interventions performed by the pharmacists.

Material and methods A prospective interventional study was carried out between February and April 2019. All patients receiving intravenous antibiotic treatment for >3 days were analysed by two pharmacists. Antibiotics included levofloxacin, ciprofloxacin, linezolid and metronidazole. The oral switch was proposed in patients who tolerated oral administration, with no fever and decrease in inflammatory markers (leucocytes and C reactive protein) and whose clinical condition had improved. Those excluded were critically ill patients and infections that were not candidates for sequential therapy (CNS infections, undrained abscesses, endocarditis and endovascular prosthetic infections).

The intervention consisted of a message from the pharmacist sent through the electronic prescription programme to the responsible physician with a recommendation to switch to oral administration. Data were extracted from the management software (Farmatools) and collected in an Excel spreadsheet.

Results A total of 117 patients were selected (53.9% men, median age 69 years). Patients were hospitalised in: pneumology (48.7%), surgery (18.8%) and internal medicine (8.6%). An intervention was made in 57 (48.7%) patients. In 78.9% (45) the intervention was accepted and 21.1% (12) were denied by medical staff. Antibiotic, number of interventions (percentage of total) and number of interventions accepted (percentage) were: levofloxacin n=40 (70.4%), acceptance 33 (82.5%); metronidazole n=7 (12.2%), acceptance 4 (57.1%); ciprofloxacin n=6 (10.5%), acceptance 4 (66%); and linezolid n=4 (7.0%), acceptance 4 (100%).

Conclusion and relevance Review of antibiotic prescriptions by the pharmacist service increased early sequential therapy, and the degree of acceptance by medical staff was high. This was related to a decrease in adverse effects and costs per patient.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.