thymoglobulin (2.5%). This difference was significant (p=0.0875).

Conclusion and relevance In our cohort of patients there was a high prevalence of NI by MDR pathogens, with *K pneumoniae* the most frequent. Ceftazidime was the most commonly used antibiotic as an empirical treatment, and urinary infections the most prevalent within our population. There seems to be a correlation between developing an infection by MDR pathogens and the induction immunosuppressant treatments that included basiliximab, although prospective studies with a larger sample size are needed to confirm these preliminary results.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-040 ADEQUACY OF ANTIBIOTIC PRESCRIPTIONS IN A NURSING HOME

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Background and importance The pervasive use of antibiotics has been identified as a major public health threat due to the emergence of antibiotic resistant bacteria. Antibiotics are among the most commonly prescribed drugs in nursing homes (NHs) and up to 75% of these are considered inappropriate.

Aim and objectives To characterise antibiotic therapy in NHs and evaluate adequacy.

Material and methods A prospective study was conducted in a NHs (264 residents) over a 3 month period (July–September 2019). All residents with antibiotic prescriptions for suspected infections were included. Data were collected by review of medical and pharmacy records: demographic and clinical characteristics, risk factors for infection, antibiotic prescribed, indication and microbiology data.

Inadequate antibiotic therapy was defined as: (1) conditions without an antibiotic indication; (2) non-adherence to therapeutic guidelines; (3) incorrect dose, route of administration or duration; (4) no microbiology sample collection when needed; and (5) microbiological evidence of infection not covered by the chosen antibiotics, or no antibiotic de-escalation.

Results We included 62 residents, mean age 81.7±10.7 years, 69.4% women, and 6.5% had an antibiotic allergy. Mean Charlson comorbidity index age adjusted was 5.8±1.9. The majority of residents presented risk factors for infection (RFF) (95.2%), mean 3.1±1.4. RFF included functional dependency (6.9% of patients), previous antibiotic therapy (59.7%) and cognitive impairment (53.2%).

The most commonly prescribed antibiotics were amoxicillin/clavulanic (24.2%), quinolones (19.4%), fosfomycin–trometamol (19.4%), cephalosporins (11.2%), fosmomycin calcium (9.7%), cloxacillin (9.7%) and other (6.4%). Mean duration was 5.6±3.5 days. Most treatments were empirical (75.8%), 21% were targeted treatment and 3.2% were prophylactic. Combination therapy was found in only one case; three intravenous route.

The most common infection was urinary tract infection (48.4%), followed by skin and soft tissue infection (22.6%) and lower respiratory tract infection (21%). Sample collection was carried out in 41.9% (76.9% before initiating antibiotic): 65.4% uroculture, 11.5% exudate culture and 23.1% others. Most of the cultures were positive (80.8%; 71.4% were monomicrobial infections). The most prevalent microorganisms isolated were gram negative isolates (85.7%); methicillin resistant *Staphylococcus aureus* was isolated in three cases (14.3%).

Antibiotic therapy was inadequate in 51.6%: (1) 9.3%; (2) 56.3%; (3) 12.5%; (4) 3.2%; and (5) 18.7%.

Conclusion and relevance Broad spectrum antibiotics are often prescribed. There was a high number of inadequate antibiotic prescriptions. Pharmacy teams are well placed to support prudent selection of antibiotic therapy in NHs.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-041 PHARMACIST LED ANTIMICROBIAL STEWARDSHIP PROGRAMME

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Background and importance Antimicrobial stewardship programmes (ASPs) aim to optimise antimicrobial prescriptions, enhancing clinical outcomes, minimising antimicrobial resistance and improving the quality and safety of patient care. Guidelines recommend a multidisciplinary team but many hospitals do not have infectious disease (ID) physician support.

Aim and objectives To analyse the effectiveness of a pharmacist led ASP in a hospital without an ID physician, with special focus on indicators of the hospital use of antimicrobial agents based on consumption.[1]

Material and methods A pharmacist led ASP was performed in a 200 bed hospital from 1 January to 30 June 2019.

a. The ASP was presented to the hospital physicians through face to face sessions.
b. To improve the prescription of antibiotics, we revised prophylaxis and antibiotic therapy in management protocols and developed a guideline with local antimicrobial recommendations.
c. Clinical sessions were held on different pathologies included in the ASP.
d. Information about antimicrobial consumption rate was provided to physicians.

In addition, the pharmacist performed a daily review of all patients who had a course of antibiotics during their hospital admission, through an electronic prescription programme. Recommendations were made to physicians related to antimicrobial spectrum, dose adjustment, stopping longer courses of antibiotics, interactions, allergies and other.

The consumption of defined daily dose (DDD)/1000 patient days was taken from the first half of 2019 and compared with the same period the previous year.

Results A total of 248 recommendations were recorded. The global consumption of antibiotics was reduced from 931 DDD/1000 patient days in the first half of 2018 to 747.9 DDD/1000 patient days in 2019 (−19.7%). Carbapenem use was reduced by 41.3% DDD (21.3 vs 12.5 DDD/1000 patient