Accordingly, the most common interventions were discontinuation of treatment (60%), switch to oral therapy (20%) and de-escalation (12%). Overall, 14% of errors intercepted were classified as being of moderate severity and 9.4% as serious. A significant reduction in the consumption of quinolones was achieved (from 15.0 to 12.6 defined daily doses/100 patient-days), with no significant change in the consumption of other antibiotics.

**Conclusion** HIGEA has identified opportunities to optimize antimicrobial use. Future work must aim to incorporate new custom-built clinical rules, including those to alert the need for prompt initiation of antimicrobial therapy.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

**Hosp Pharm** 2017;52:679–84.
No conflict of interest,

**5PSQ-034** LINEZOLID AND SEROTONIN SYNDROME

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**Background** Serotonin syndrome (SS) is a potentially life-threatening clinical condition associated with the use of drugs that promote serotonergic neurotransmission. It is characterised by mental, autonomic and neuromuscular symptoms. Incidence is unknown and it is frequently underdiagnosed.

It is unknown how to predict who will develop it, so combinations of serotonergic agents should be avoided. It is essential to maintain a high clinical suspicion and knowledge of medications that can cause it. In 2016, the FDA issued a statement that included a list of drugs that increase serotonin. One of these drugs is linezolid, an antibiotic that is not usually associated with serotonergic effects.

**Purpose** Study frequency and relevance of this interaction between linezolid and serotonergic agents.

**Material and methods** Retrospective study of patients admitted under treatment with linezolid during 2017. Pharmacotherapeutic histories were analysed for all patients who received treatment with linezolid in electronic prescribing software (Farmatools). In those patients in whom concomitant use of serotonergic agents was detected, clinical histories were checked to see if they had been diagnosed with SS.

**Results** We found 77 patients treated with linezolid, 11 (14%) had concomitant prescriptions with serotonergic agents. In no case were more than two serotonergic drugs used at the same time. The most frequent interaction was with fentanyl (36%), followed by tramadol (27%): other less frequent were pethidine, sertraline, venlafaxine and citalopram. By therapeutic group, the most frequent interaction was with opioids (72% of patients with interaction), the rest with antidepressants. In no case was SS diagnosed.

**Conclusion** The number of patients with concomitant prescriptions of serotonergic agents was low and for most of them, risk was acceptable due to the lack of a therapeutic alternative. The incidence of SS cannot be determined by the reduced data, although it can be estimated as low, since no case has been presented. The likelihood of experiencing SS has increased in recent years as a result of the extensive use of drugs with serotonergic actions. However, it is possible that it occurs more frequently with other medications, since linezolid is an antibiotic for hospital use and usually restricted, which requires the validation of a pharmacist, who can detect this type of interaction.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

http://www.fda.gov/Drugs/DrugSafety/ucm489676.htm
No conflict of interest.

**5PSQ-035** ANALYSIS OF THE MEDICATION TREATMENT OF COMMUNITY-ACQUIRED PNEUMONIA TREATED IN THE COMMUNITY AND HAVING RESULTED IN HOSPITALISATION

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**Background** Acute community-acquired pneumonia (CAP) is a widespread infection worldwide, causing many hospitalisations and deaths. The repeated and inappropriate use of antibiotics is the main cause of the emergence of bacterial resistance that can lead to therapeutic dead ends.

**Purpose** This study assessed the pharmacological management of CAP in community and hospital settings, according to the applicable national standards (NS).

**Material and methods** This was a retrospective and observational study, performed over 1 year in 13 short-stay wards in a 2,000-bed health facility. The patients included had a CAP previously treated in the community, knowing that each patient could be treated with one or more antibiotic strategies. Two infectious physicians and a senior clinical pharmacist analysed the compliance of antibiotic orders to NS for the medication choice (M), the medication dosage (P) and the treatment duration (D).

**Results** A total of 204 patients were included. The rates of patients with at least one non-compliance were 67.9% and 45.9% respectively in the community (n=187) and hospital (n=181). The antibiotic therapies were non-compliant to NS for 44.5% on M (n=238 antibiotic therapies), versus 33.2% (n=226) respectively in the community and hospital, 20.6% on P (n=218) versus 4.9% (n=226) and 30.6% on D (n=206) versus 19.0% (n=216). In the emergency department (n=47), 23.8% and 6.1% of antibiotic orders were non-compliant for M and P, respectively.

Other works published in the literature on the rate of intra-hospital nonconformities present results similar to ours. This innovative study (hitherto never performed in the outpatient sector in France) reminds us of the importance of respecting the recommendations for optimal recovery of patients with CAP, avoiding multiple re-hospitalisations and preserving the efficacy of the existing antibiotic arsenal.

**Conclusion** Non-compliance to NS for antibiotic therapies can be explained by the multiplicity of prescribers, a lack of communication, a difficult access to clinico-therapeutic recommendations, microbiological information and medical imagery tests.