categories C, D and X have been considered. The degree of rigor and the reliability rating were also collected.

Results A total of 69 men were interviewed. The mean age was 77 years, all older than 60 years. 31 patients were receiving treatment with apalutamide, 26 with abiraterone and 12 with enzalutamide. The patients had a mean of 12.6 ± 15.1 months of treatment. 88.5% took 5 or more medications.

A total of 709 lines of treatment were analysed, finding that 66.6% of the patients presented an interaction in their treatments, 1.9 interactions per patient.

According to the severity of the interactions, 76.2% (91) were C, 10.1% (12) D and 12.7% (15) category X. 63.5% of the interactions were with apalutamide, 26.2% with enzalutamide and 10.1% with abiraterone. 4 pharmacological groups are responsible for category D interactions and 1 is responsible for category X interactions (proton pump inhibitors).

Conclusion and Relevance

- The study has allowed us to detect a high number of interactions, although the proportion of patients with clinically relevant interactions is low.
- The pharmacist plays a very important role in the prevention, detection and monitoring of interactions in this group of patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-262 A NOVEL ARTIFICIAL INTELLIGENCE-BASED TOOL TO ASSESS ANTICHOLINERGIC BURDEN: A SURVEY

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Background and Importance Many medications possess anticholinergic activity. Their use is associated with a number of serious adverse effects including cognitive effects. The cumulative anticholinergic effect of medications as assessed by tools such as the anticholinergic burden scale (AchB) can identify people particularly at risk of anticholinergic side-effects. Currently, more than 20 tools are available for clinicians to use, but there is no consensus on the most appropriate tool.

Aim and Objectives To assess the overall need for an assessment tool as well as the usability of a newly created tool, the International Anticholinergic Cognitive Burden Tool (IACT), to assess anticholinergic burden of medications.

Material and Methods A newly created online tool, International Anticholinergic Cognitive Burden Tool (IACT), based on natural language processing and chemical structure analysis, was developed and made available for clinicians to test its functions. We carried out a survey (between 8 February to 31 March, 2021) to assess the overall need for an assessment tool as well as the usability of the IACT.

Results A total of 110 responses were received from different countries and practitioners' groups. The majority of the participants (86.11%) stated they would use a tool for AchB assessment if available and when they were asked to rate the IACT against other tools, amongst 34 responders, 20.59% rated it better and 8.82% rated it significantly better, 44.12% rated it neither better, nor worse, 14.71% rated it worse and 11.76% somewhat worse.

Conclusion and Relevance There is a need for an anticholinergic burden calculator to assess the anticholinergicity of medications. Tools such as the IACT potentially could meet this demand due its ability to assign scores to current and new medications appearing on the market based both on their chemical structure and reported adverse pharmacological effects.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-263 THE PHARMACIST'S ROLE IN OPTIMISING SURGICAL ANTIBACTERIAL PROPHYLAXIS (SAP)

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Background and Importance Surgical antibiotic prophylaxis in orthopaedic joint arthroplasties is common reason for unnecessary, excessive and irresponsible use of antibiotics.

Aim and Objectives The purpose of this study was to analyse whether the continuous presence of clinical pharmacist on the ward may improve SAP guidelines adherence and clinical outcomes.

Material and Methods The study was conducted at an Orthopaedics Department of a tertiary care medical centre. Overall guideline adherence (agent, dose, frequency, duration), clinical outcomes (length of stay-LOS, number of surgical site infections-SSIs), antibiotic exposure and direct antibiotic costs were compared between pre-intervention (retrospective observational) and intervention (prospective) periods. The clinical pharmacist's interventions consisted of proactively controlling antibiotic prophylaxis every day on an individual level to ensure compliance with SAP (agent selection, dosage, and duration) guidelines, attending surgical ward visits, participating in antibiotic related decisions, and providing continuous counselling service. SAP guideline adherence, antibiotic exposure, and costs in the two periods were compared using Chi-square, Fisher exact, and Mann-Whitney tests.

Results Significant improvement in overall SAP guideline adherence (by 56.2%, from 2% to 58.2%, $p<0.001$) was observed. Significant reduction in SAP duration (by 42.9%, 4.1 ± 2.1 vs 2.1 ± 1.9 days, $p<0.001$), in SAP antibiotic exposure (by 41%, from 6.1 ± 0.05 to 3.6 ± 4.3 DDD/patient, $p<0.001$), and average prophylactic antibiotic cost (by 54.8%, 9278.8 ± 6094.3 vs 3598.2 ± 3354.6 HUF/patient)