modifying antirheumatic drugs (bDMARDs) are used to slow down disease progression.

Aim and objectives To analyse the reasons for treatment discontinuation with biological drugs in patients diagnosed with rheumatoid arthritis in our hospital.

Material and methods A retrospective study was performed in which all patients diagnosed with rheumatoid arthritis treated with biological drugs at some point (between 2007 and 2016) were included. Data on biological drug dispensations, causes of treatment discontinuation, sex and age of the patients were collected. We use Excel to analyse the data.

Results 136 patients diagnosed with rheumatoid arthritis treated with a biological drug were included, with a total of 251 treatments (85 etanercept, 50 infliximab, 48 adalimumab, 23 abatacept, 11 certolizumab, 7 golimumab and 5 tocilizumab). Patients received a median of 1.8 biological drugs (range 1–6 drugs). Mean patient age was 41.12±11.33 years, and 81.9% of all patients were women. 103 patients discontinued therapy at some point in their treatment with the prescribed biological drug, corresponding to a total of 196 of 251 (78.1%). 33 patients continued with the same drug that they started treatment. 63 (74.1%) discontinuations were due to etanercept, 41 (82.0%) to infliximab, 39 (81.2%) to adalimumab, 16 to abatacept (69.6%), 20 to rituximab (90.9%), 7 to certolizumab (63.6%), 5 to golimumab (71.4%) and 5 to tocilizumab (100%). The main causes of treatment discontinuation were adverse events (29.6%), followed by secondary failure (24.5%) and primary failure (18.4%). Other reasons were patient reasons (3.6%), patient's illness (3.6%), remission (3.1%) and immunogenicity (1.5%). 14.8% of discontinuations were unknown. Allergic or skin reactions were the most common adverse events.

Conclusion and relevance Certolizumab was the biological drug with the lowest discontinuation rate, followed by abatacept, golimumab and etanercept. Among the different reasons for treatment discontinuation with biological drugs, adverse effects were the main cause (29.8%), with about 50% related to allergic or skin reactions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-180 IMPACT OF SEDATIVE DRUGS ON VITAL SIGNS DURING PROCEDURAL SEDATION AND ANAESTHESIA: A RETROSPECTIVE COHORT ANALYSIS

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Background and importance Anaesthetic drugs are vital during surgical procedures to lower patient discomfort but they carry significant risks for adverse events. Regular follow-up of patterns in anaesthetic related adverse drug events (ARAEs) is therefore required.

Aim and objectives To examine ARAE occurrence and trends during procedures (gastro-/colonoscopy (GCS), cardiac ablation (CA)) requiring general anaesthesia in a university hospital.

Material and methods Inclusion criteria were: adult patients undergoing GCS or CA between 1 July 2017 and 30 June 2019. Retrieved procedures were chronologically sorted after which a 10% randomised sample was taken, and stratified according to procedure, age and gender. For each patient, characteristics were retrieved from the medical file, including risk score, home medication (HM), premedication, procedure characteristics (eg, used anaesthetics/antidotes, anaesthesiologist's experience, timing) and whether ARAEs occurred (oxygen saturation <90%, blood pressure drop ≥20%, bradycardia <45 beats/min and apnoea). Predictors were selected using Spearman analysis, retaining variables with $p<0.2$, which were then entered in a stepwise backward logistic regression. A times series analysis was done to assess time dependent trends.

Results 1355 CAs and 1475 GCSs were retrieved, leading to 283 (135 CA/148 GCS) procedures selected for analysis, with 44 (15.5%; 37 CA/7 GCS) anaesthesia files incomplete or missing. Most patients experienced at least one ARAE (174/239) with the majority experiencing low blood pressure (169/174), followed by bradycardia (15/174), oxygen desaturation (3/174) and apnoea (1/174). When looking at predictors for any ARAE, use of inhalation anaesthetic (OR 2.74; $p=0.024$) and midazolam premedication (OR 5.03; $p=0.035$) were the most important, with opioid HM also showing a trend (OR 7.49; $p=0.054$). For bradycardia, patients receiving amiodarone/verapamil HM (OR 5.70; $p=0.034$) or with an inhalation anaesthetic (OR 5.36; $p=0.003$) had a higher risk, while ACE inhibiting HM increased the desaturation risk (OR 73.32; $p=0.046$). Regarding low blood pressure and apnoea, no patient or procedure related factors could be found. Time series analysis revealed no time dependent trends in ARAE occurrence or incomplete files.

Conclusion and relevance The impact of ACE inhibitors on ARAEs is well described, with a preprocedural stop suggested. However, long term consequences are not clear. Furthermore, preprocedural midazolam may need to be reviewed, as other measures to decrease anxiety are also effective. Finally, increased attention to anaesthesia documentation is needed.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Hollmann, *et al*. *Anesth Analg* 2018;**127**:678–87.
2. Jlala, *et al*. *Br J Anaesth* 2010;**104**:369–74.

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5PSQ-181 IS INSTANT ALWAYS BETTER? PHARMACOKINETICS OF TABLET VERSUS GRANULATE FORMULATION OF PARACETAMOL IN FRAIL OLDER ADULTS

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Background and importance Pain is highly prevalent in old, frail adults with paracetamol as the mainstay treatment. Pain management is regularly suboptimal and using different paracetamol formulations might improve pain control. It is not

known whether faster dissolving formulations of paracetamol granulate result in improved exposure.

Aim and objectives Our objective was to determine the pharmacokinetics (PK) of two different formulations of oral paracetamol in old, frail adults.

Material and methods Geriatric inpatients aged 80 years or older were eligible for inclusion if they received 1000 mg of paracetamol as a tablet or a granulate formulation at 8am, 2pm and 8pm. Samples were collected at trough levels (T0) and at +0.5 (T0.5), +1 (T1), +2 (T2), +4 (T4), +5 (T5) and +6 hours (T6). PK parameters were evaluated for both paracetamol formulations.

Results 36 patients were included, with a mean age (±SD) of 86.78 (±4.20) years. Most of the patients (n=26/36, 72%) received the tablet; 10 patients (28%) were prescribed the granulate formulation. Seven (21%) patients achieved an average plasma concentration (Css) above the analgesic target of 10 mg/L. Median Css (IQR) for the tablet group was 7.76 (6.31–9.08) mg/L and 9.27 (4.94–11.03) mg/L for the granulate group. Tmax was 50.5 (31.50–92.50) min and 42.50 (33.75–106.75) min for the tablet and granulate formulation, respectively (p=1.00). Cmax for tablet users was 15.95 (12.38–21.19) mg/L and 15.59 (10.80–21.77) mg/L for the granulate users (p=0.698).

Conclusion and relevance Large interindividual differences in PK parameters were found in a very old patient sample. Absorption parameters such as Tmax and Cmax were not significantly different between the tablet and granulate formulation. A trend for a higher Css was observed for patients in the granulate group.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-182 ANTICHOLINERGIC BURDEN IN PATIENTS ADMITTED TO A PSYCHIATRIC HOSPITAL

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Background and importance The effect of taking drugs with the capacity to develop anticholinergic adverse effects, both peripheral (urinary retention, constipation, etc) and central (cognitive/functional disorders), is cumulative and may be different depending on the measurement scale used. In the psychiatric population, this effect may be greater due to the type of medication used.

Aim and objectives To analyse the prevalence and risk of anticholinergic burden (AB) in hospitalised psychiatric patients through the use of different calculation scales, and comparison between them to determine the most indicated in our psychiatric sample. To establish the most prescribed antipsychotic medications, and to determine if there are differences between the short stay unit (CSU) and the long/medium stay ward (LSW).

Material and methods A cross sectional study was conducted in psychiatric patients admitted in the last month. Variables collected were: demographic (age, sex), hospitalisation unit, number of drugs with AB and their anticholinergic risk according to the following scales: anticholinergic drug scale (ADS), anticholinergic risk scale (ARS), drug burden index (DBI), anticholinergic cognitive burden scale (ACB), Chew's scale (Chew), anticholinergic activity scale (AAS), anticholinergic load scale (ALS), clinician rated anticholinergic scale (CrAS) and Duran's scale (Duran). The variables were obtained from the electronic medical records, and the AB and risk (no risk/low/medium/high) were calculated according to the aforementioned scales, using the AB calculator tool.

Results 67 patients (63% women) were treated with drugs with anticholinergic effects; mean age was 42.9 years. All patients had been prescribed some drug with AB (average number 5). Average number of drugs with AB in the CSU was 3.8 compared with 5.5 in the LSW (p<0.05). The AB on each scale was: 4.3 (high) with ACB; 3.7 (medium) with Chew; 2.3 (medium) with CrAS; 3.3 (medium) with AAS; 2.3 (medium) with ARS; 2.7 (high) with Duran; 2.9 (high) with DBI; 5.3 (high) with ADS; and 1.8 (medium) with ALS. The most prescribed drugs with anticholinergic activity were: benzodiazepines (88.1%), olanzapine (46.3%), antidepressants (41.8%) and quetiapine (37.3%).

Conclusion and relevance The number of psychiatric patients treated with drugs with anticholinergic effects was very high (100%), and statistically higher in the LSW than in the CSU. Studies are needed to determine which of these scales is the most useful to apply in our population. The drugs with anticholinergic activity most prescribed were, by far, benzodiazepines. Withdrawing (progressively), replacing pharmacological treatment (if it cannot be suspended) or reducing the dose (minimum effective dose) would be valid strategies to reduce the anticholinergic burden.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-183 CONCOMITANT USE OF ACETYLCHOLINESTERASE INHIBITORS AND DRUGS WITH ANTICHOLINERGIC PROPERTIES AT ADMISSION BY EMERGENCY DEPARTMENT

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Background and importance Evidence suggests that pharmacological inefficacy and even worsening of conditions in elderly people with dementia may be due to the concurrent use of acetylcholinesterase inhibitors (AChEI) and drugs with anticholinergic properties (DAP).

Aim and objectives To assess the concomitant use of DAP and AChEI at admission to the emergency department (ED).

Material and methods A retrospective observational study was conducted in elderly patients treated with AChEI and DAP at admission to the ED from March to May 2019. Analysed variables were: gender, age, type of AChEI, number of other concomitant prescribed drugs and which of them were DAP, symptoms related to cognitive impairment and discharge destiny. Anticholinergic risk assessment was determined using the consensus scale of Durán *et al*, which classifies different drugs based on their anticholinergic potential (1 mild/2 severe). Statistical analysis was performed by IBM SPSS statistics software