5PSQ-177 CARDIOVASCULAR RISK AND ALTERED LIPID PROFILE ASSOCIATED WITH TREATMENT WITH THE KINASE JAK INHIBITORS, TOFACITINIB AND BARICITINIB

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Background and importance Alterations in the lipid profile and increased cardiovascular risk (CV) have been described in those patients treated with JAK kinase inhibitors, such as baricitinib and tofacitinib.

Aim and objectives To determine the CV risk factors and alteration of the lipid profile in patients treated with baricitinib/tofacitinib in a reference hospital.

Material and methods A retrospective, 25 month, observational study was conducted between January 2018 and February 2020 in all patients treated with tofacitinib/baricitinib. The following variables were collected: age, sex, and diagnosis and duration of treatment. In each case, the CV risk factors were analysed: obesity, smoking, high blood pressure (HTA) and diabetes mellitus (DM). To determine the appearance of hyperlipidaemia, levels of total cholesterol (TOT COL), LDL cholesterol (LDL COL) and triglycerides (TG) were analysed prior to and during the administration of tofacitinib/baricitinib. Prescription of statin-type antihyperlipaemic drugs in the electronic prescriptions was determined.

Results During the study period, 60 patients were included (71.7% women; mean age 52.9 years (24–70)). 70% were treated with tofacitinib (n=42). The classification according to diagnosis was: 81.6% (n=49) rheumatoid arthritis, 8.3% (n=5) non-rheumatoid arthritis and 10% other (n=6). Average duration of treatment was 11 months. Lipid parameters, pre versus post treatment, were the following: elevated TG levels: 13.3% (n=8) versus 31.7% (n=19); high LDL COL levels: 3.3% (n=4) versus 28.3% (n=17); and high TOT COL levels: 18.3% (n=11) versus 55% (n=33). 65% of patients (n=39) presented some CV risk factors: smoking 69.2% (n=27), HTA 46.2% (n=18), obesity 17.9% (n=7) and DM 25.6% (n=10). Of these, 43.6% (n=17) had ≥ 2 associated factors. 33.3% of patients (n=20) had a statin-type drug prescribed in their electronic prescription. In 70% of cases (n=14), hyperlipidaemia was observed despite the statin treatment.

Conclusion and relevance The study showed how most patients have baseline CV risk factors. The use of these drugs caused worsening of the lipid profile in more than 50% of patients, with increases in TG, LDL and total cholesterol, despite receiving lipid lowering treatment. Therefore, it is necessary to monitor this type of AE, as well as to evaluate other therapeutic alternatives to avoid possible harmful long term CV effects.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-178 HEPATOTOXICITY ASSOCIATED WITH ACUTE TOCILIZUMAB TREATMENT IN PATIENTS WITH SARS-COV-2 INFECTION

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Background and importance Tocilizumab (TCZ) has been proposed to mitigate the cytokine storm syndrome associated with SARS-CoV-2. However, acute administration of this drug has been shown to cause serious adverse effects at the level of the liver, including acute liver failure.

Aim and objectives To evaluate the liver toxicity profile associated with the acute use of TCZ in patients with SARS-CoV-2 infection.

Material and methods A retrospective single centre study, lasting 2 months (March to April 2020), was conducted in all patients with a clinical suspicion/diagnosis confirmed of SARS-CoV-2 infection and who had received treatment with TCZ. The following variables were collected: age, sex, posology scheme of TCZ, admission to the intensive care unit (ICU), need for orotracheal intubation (OTI) and death during the hospital stay. The hepatic profile was analysed for levels of hepatic transaminases (GOT/AST and GPT/ALT) and total bilirubin (TOT BL) pre and post completion of treatment with TCZ. Alteration of liver parameters was classified as mild ($1-3 \times$ upper limit of normality (UPN)), moderate ($3-5 \times$ UPN) and severe ($\geq 5 \times$ UPN).

Results During the study period, 44 patients with SARS-CoV-2 infection were treated with TCZ (65.9% men (n=29); mean age 62.3 years (31–82)). The posology scheme of TCZ used was the following: single dose (68.2%, n=30), double dose (18.2%, n=8) and triple dose (11.6%, n=6). Two patients (4.5%) received a 50% reduced dose because of previous liver failure. During admission, 56.8% (n=25) of patients required a stay in the ICU. 36.4% (n=16) needed OTI. 9.1% (n=4) died during admission. Liver profile analysis showed that 72.7% of patients (n=32) presented with normal levels of GPT/ALT and GOT/AST before treatment. 59.1% (n=26) presented with normal levels of BL TOT and 4.5% (n=2) had high levels. In 34.1% (n=15) there were no data. After treatment with TCZ, 86.3% (n=38) developed hepatotoxicity. Elevation of GPT/ALT was observed: mild (42.1%), moderate (28.9%) and severe (28.9%); elevation of GOT/AST: mild (44.7%), moderate (31.6%) and severe (13.2%). 42.9% (n=12) presented with high levels of BL TOT after receiving TCZ.

Conclusion and relevance The study showed how a high proportion of patients with SARS-CoV-2 infection developed severe liver toxicity after the use of the drug. However, future studies will be needed to clarify the involvement of SARS-CoV-2 itself in the development of hepatotoxicity.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-179 REASON FOR DISCONTINUATION OF BIOLOGICAL DRUG TREATMENT IN RHEUMATOID ARTHRITIS

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Background and importance Rheumatoid arthritis is a chronic, autoimmune disease, with unknown aetiology, characterised by chronic inflammation of synovial articulations. Biologic disease

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

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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 patients 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 $\geq 20\%$, 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.

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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