- Final concentration of the KCl infusion ≤ 4 g/L.
- Mention of the final volume of the KCl infusion.

Results One-hundred and four patients were included.

- 30.7% (95% CI: $\pm 8.9\%$) of the prescriptions were relevant in term of indication.
- 38.4% (95% CI: $\pm 9.35\%$) of the prescriptions used the correct specific units.
- In 99.1% (95% CI: $\pm 1.82\%$) of cases the correct slow infusion rate was prescribed.
- In 15.3% (95% CI: $\pm 6.9\%$) of cases a ready-to-use solution was prescribed.
- Mention of the nature of the dilution solution to be used was found in 84.6% (95% CI: $\pm 6.9\%$) of cases.
- Final concentration of the KCl infusion was ≤ 4 g/L in 73% (95% CI: $\pm 8.5\%$) of cases.
- Mention of the final volume of the KCl infusion was detailed in 82.6% (95% CI: $\pm 7.29\%$) of cases.

Conclusion Indications to use injectable KCl were not strictly applied, which may be explained by prescribing habits and the desire to quickly normalise hypokalaemia.

A very low utilisation of ready-to-use products which is probably due to insufficient information to prescribers concerning the available ready-to-use products.

Most prescriptions were not using the recommended units, and lack of knowledge of the prescriber of the need to prescribe in g or mmol may be the cause of this.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-021 PHARMACOGENETIC TESTING FOR PERSONALISATION OF STATIN THERAPY

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Background The solute carrier organic anion transporter family member 1B1 (*SLCO1B1*) protein facilitates the hepatic uptake of simvastatin. The *SLCO1B1* c.521T>C genetic polymorphism (rs4149056) decreases the function of *SLCO1B1* and is a strong predictor of simvastatin-induced myopathy. *SLCO1B1* genotyping and pharmacist interpretation of the results are a step forward in personalising statin therapy. Hospital pharmacists have an innovative role in the clinical implementation of *SLCO1B1* pharmacogenetic testing for statin therapy in the interests of patient safety.

Purpose To identify the presence of the *SLCO1B1* c.521T>C genetic polymorphism in a cohort of cardiac patients on simvastatin to correlate genotype results with myopathy risk.

Material and methods Patients (n=110) on simvastatin were recruited by convenience sampling from the cardiac catheterisation laboratory of an acute general hospital. An EDTA-blood sample was collected from each patient after informed written consent. Genomic DNA was extracted and real-time polymerase chain reaction genotyping to identify the

SLCO1B1 c.521T>C (rs4149056) single nucleotide polymorphism was performed using the Sacace biotechnology kits and Rotor-Gene 6000/Q for fluorescence detection. The patient cohort was classified into three genotypes: TT (homozygous wild-type – normal *SLCO1B1* function); TC (heterozygous – intermediate *SLCO1B1* function); and CC (homozygous variant – low *SLCO1B1* function). The 2014 Clinical Pharmacogenetics Implementation Consortium (CPIC) guideline, which suggests prescribing a lower simvastatin dose (20 mg/day) or consideration of rosuvastatin instead of simvastatin in patients genotyped as TC or CC, was used for genotype-based therapy recommendations.

Results The 110 patients (all caucasian, 90 males, mean age 65+1.02 years) were genotyped as TT (78.2%, n=86), TC (20.0%, n=22) and CC (1.8%, n=2). Fifteen patients genotyped as TC or CC were on a higher simvastatin dose (40 mg/day) than suggested by the CPIC guideline for *SLCO1B1* and simvastatin-induced myopathy.

Conclusion Patients genotyped as TC have mild risk of myopathy and patients genotyped as CC have a higher risk of myopathy compared to patients genotyped as TT or TC. Pharmacists should recommend *SLCO1B1* genotyping in patients on statin therapy, interpret test results and suggest therapy recommendations according to genotype to improve patient safety with respect to myopathy.

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No conflict of interest.

5PSQ-022 AN EVALUATION OF THE PHARMACIST INTERVENTION IN INTRAVENOUS MIXTURES' STABILITY

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Background The knowledge concerning intravenous mixtures' stability is important because their effectiveness and safety depends on it.

Purpose To evaluate a check of the replacement of the infusion bag in time, concerning dopamine and nitroglycerin to ensure their effectiveness and safety in different hospitalisation units.

Material and methods An observational prospective study was carried out during 3 months. Dopamine and nitroglycerin intravenous mixtures' prescriptions were selected from a pharmacy electronic prescription program. From the pharmacy department an information sheet was sent to the hospitalisation units, where patients were treated with any of the mixtures, with the following information: patient identification, intravenous mixture prescribed and the text: 'The stability of the mixture is 24 hour. Change the dilution every day at the same time.'

The variables studied were the infusion rate (<21 mL/h, >21 mL/h and =21 mL/h) and the time when the mixture was replaced. The information sources used were electronic medical files, nurse interviews and direct observation of the mixture.

Results Sixty prescriptions were studied: 48 mixtures were prescribed with an infusion rate of <21 mL/h, nine mixtures