modified Rankin Scale (mRS) score and National Institutes of Health Stroke Scale (NIHSS) score at admission and discharge, anticoagulant treatment prescribed after the episode and number of consultations to the emergency department in the year after hospital discharge were recorded.

Results Thirty-two patients were included (mean Age 75.2 (11.8) years): 22 (68.7%) were treated with vitamin K antagonists (VKA) and 10 (31.2%) with direct oral anticoagulants (DOACs). Eleven (34.4%) patients had a mRS score of 0 prior to the episode, 6 (18.8%) had a score of 1, 13 (40.6%) a score of 2 and 2 (6.2%) a score >2. The median score on the NIHSS scale at admission was 14 points (IQR 10–20) and 1 (0–7) point at discharge. Five (15.6%) patients died during hospitalisation. Among patients receiving VKA treatment, 13 (59.1%) had an international normalised ratio of <2 points at admission. Regarding DOACs, 5 (50.0%) patients had lower doses than the dose recommended. Of the 27 patients discharged, 17 (62.9%) changed their anticoagulation treatment at discharge, 2 (7.4%) increased their previous dose and in 2 (7.4%) patients the anticoagulant therapy was withdrawn. Fifteen (55.5%) patients presented again to the emergency department during the year after discharge: 7 (46.6%) were events directly related to anticoagulant therapy.

Conclusion and relevance A significant percentage of patients treated with DOACs suffering from stroke were under dosed. Consultations after discharge were frequent in this group of patients. Our results open the door to the design of multicentre studies that will allow us to verify the best anticoagulation strategies in this group of patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-015 SITUATIONAL ANALYSIS OF POSTOPERATIVE IRON SUPPLEMENTATION PRESCRIPTIONS IN A PLASTIC SURGERY DEPARTMENT

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Background and importance Following the computerisation of prescriptions in the plastic surgery department of our hospital, some protocols have been modified, leading to an increase in iron supplementation (IS) prescriptions by anaesthetists in postoperative care.

Aim and objectives The aim of our study was to perform an inventory of iron prescriptions and administrations in order to assess their relevance

Material and methods A retrospective analysis was performed from 29 January 2019 to 29 August 2019. Compliance of IS administrations with preoperative prescriptions and biological examinations was assessed. The local protocol recommended first intention use of iron saccharose hydroxide (ISH) when possible (due to the cost of ferric carboxymaltose (FCM)) and also defined the relevant biological parameters to achieve these administrations (1 g of FCM or two injections of 300 mg ISH separated by a 48 hour interval if haemoglobin <12 g/dL and ferritin <100 µmol/L or ferritin <600 µmol/L and transferrin saturation factor <0.2).

Results Sixty-nine IS prescriptions were collected, of which 32 (46%) were followed by an administration. The average length of stay (ALS) for patients was 2.8 days. Of these 69 prescriptions, 27 (39%) were not associated with the prescription of an iron biology (IB). Twenty-two administrations of ISH, 7 of FCM, 1 of ferrous fumarate and 2 of ferrous sulphate, were performed. Of these 32 administrations, 21 (66%) were justified by the IB. For the 11 others, the IB was incomplete. Of the 22 patients who received ISH, 18 (82%) received only one postoperative dose.

Conclusion and relevance In agreement with the protocol, ISH was mainly prescribed. Nevertheless, the ALS of the patients was incompatible with the administration recommendation. We note that in each case where an IB was complete, an IS was justified in postoperative care. This work will be followed by a consultation with the anaesthetists. Reflection on the dose and galenic of IS in relation to the iron deficiency calculation for each patient would be interesting in the context of a possible improved recovery programme after surgery.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-016 INAPPROPRIATE USE OF HUMAN ALBUMIN IN A TEACHING HOSPITAL

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Background and importance Albumin is a widely used medication for the treatment of critically ill patients, such as those with cirrhosis, burns patients and neonatal patients. However, its management is still a real challenge because of its high cost and controversial uses.

Aim and objectives The aim of the study was to determine the frequency of inappropriate albumin prescriptions according to guidelines and scientific data in a teaching hospital.

Material and methods Over a 4 month period, each prescription of human albumin in our teaching hospital was reviewed according to guidelines and recommendations. Data collected were: indication, clinical healthcare unit, patient sex and age, dosage and treatment times, and albuminaemia. Statistical analysis was performed by PSPP software.

Results A total of 230 prescriptions were studied during the 4 month period coming from 10 healthcare units. Among them, 201 prescriptions were included in this work concerning 80 patients with a sex ratio of 1.10 and mean age of 45.85 ±25.84 years. Mean albuminaemia was 20.84±5.14 g/L. The mean dosage was 3±2 vial/day. Median duration of treatment was 2 days (IQI 4). The gastroenterology service ordered the most, with 92 orders (46%), followed by the paediatric service with 38 orders (19%). Seventy prescriptions (35%) were judged as inappropriate. The most frequent inappropriate indication was nephrotic syndrome with albuminaemia >20 g/l without hypovolaemia or pulmonary oedema (19 prescriptions, 9.5%) followed by major surgery indication with serum albumin >20 g/L (15, 7.5%). In total, 1694 vials of human albumin were consumed: 822 vials (48.5%) were consumed according to inappropriate indications. The estimated cost of inappropriate use was 15 000€ for a 4 months period.

Conclusion and relevance This study suggests that inappropriate use of human albumin is quite common with high costs. Hence adoption of comprehensive guidelines may reduce the

inappropriate use and healthcare costs. In addition, audit and educational feedback might strengthen the results.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Liumbruno G, Bennardello F, Lattanzio A, Piccoli P, Rossettias G. Recommendations for the use of albumin and immunoglobulins. *Blood Transfus* 2009;**7**:216–234.

No conflict of interest.

4CPS-017 EFFICACY AND SAFETY OF TOLVAPTAN IN THE TREATMENT OF POLYCYSTIC KIDNEY DISEASE

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Background and importance Tolvaptan is the first authorised drug for the treatment of autosomal dominant polycystic kidney disease (PQRAD).
Aim and objectives To analyse the efficacy and safety of tolvaptan in the treatment of PQRAD compared with the results of the TEMPO study.
Material and methods This was a descriptive, observational and retrospective study of patients treated with tolvaptan (August 2017–April 2019). Variables studied were: age, sex, arterial hypertension, total renal volume (VRT), creatinine, serum potassium and sodium, transaminases and glomerular filtration rate (GFR). Adverse reactions were recorded. For collection of data, the electronic medical history was used. Statistical analysis was performed with the Stata14 programme.
Results We included 23 patients (8 women, 5 men), median age 46 years (31–63) years. All had VRT >1000 mL (median 1920 mL (1230–3154)). At the beginning of treatment, GFR was 49.7 mL/min/1.73 m^2 (25.6–102.31): 3 patients had stage 1 chronic kidney disease, 2 patients had stage 2, 10 patients stage 3A, 6 patients stage 3B and 2 patients stage 4. All patients suffered progressive deterioration of renal function during treatment: 5.25 mL/min/1.73m^2 (−3.61–18.29) and 8.28 mL/min/1.73 m^2 (−1.87–15.59) at 3 and 6 months, respectively, and 8.49 mL/min/1.73 m^2 (4.21–14.06) at the end of the treatment year. Tolvaptan was suspended in three patients due to impaired renal function (GFR <20 mL/min/1.73 m^2); all other patients were still receiving treatment at the end of the study (five with dose reduction to 60/30 mg). All patients reported polyuria and polydipsia and no patient suffered clinically relevant alterations in serum sodium or potassium. Relative to liver function, three patients suffered specific alterations in AST, ALT and GGT above normal values (57, 76 and 63 IU/L, respectively).
Conclusion and relevance Our results, compared with the TEMPO study, showed a higher rate of renal function deterioration, measured as a decrease in GFR rate after 1 year of treatment (8.49 vs 2.7 mL/min/1.73 m^2), probably in relation to the worst baseline condition of the patients included in our study. Therefore, it is essential to identify the population susceptible to receiving this drug, prioritising those patients with GFR >45 mL/min/1.73 m^2 and with a high risk of rapid progression.

REFERENCES AND/OR ACKNOWLEDGEMENTS

TEMPO clinical trial.
No conflict of interest.

4CPS-018 EFFICACY OF UREA IN THE TREATMENT OF HYPONATRAEMIA IN SYNDROME OF INAPPROPRIATE ANTIDIURETIC HORMONE SECRETION

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Background and importance The consequence of the syndrome of inappropriate antidiuretic hormone secretion (SIADH) is a hypotonic hyponatraemia. Urea is a well tolerated therapeutic option indicated to correct sodium levels, acting as an osmotic diuretic, eliminating a large amount of water in urine accompanied by an increase in plasma sodium concentration.
Aim and objectives To evaluate the efficacy of urea in controlling hypernatraemia due to SIADH in a third level hospital.
Material and methods This was a quasi-experimental study. Patients with hyponatraemia treated with urea in 2019 were included.

The main variable of our study was serum sodium level before treatment with urea at 24 hours, 48 hours, 14 days and 60 days. Age and sex were included as secondary variables.

There were no extreme outliers and the data were normally distributed for each measured time, as assessed by box plot and the Shapiro–Wilk test ($p>0.05$), respectively. A one-way repeated measures ANOVA was conducted to determine whether there was a statistically significant difference in sodium concentration before and after treatment with urea. The analyses were performed using the SPSS/PC statistical programme (V.24.0 for Windows, SPSS Inc, Chicago, Illinois, USA).
Results Thirty-three patients were treated with urea for 9 months. Of these, 67% were men and mean age was 77±13 years. Serum sodium levels before treatment and at 24 hours, 48 hours, 14 days and 60 days were 125±4, 127±5, 129±5, 134±4 and 134±4 mg/dL respectively. Time did not elicit statistically significant changes in sodium levels before and after treatment with urea ($F=4.1$, $p=0.074$).
Conclusion and relevance In the study, there were no significant differences in plasma sodium values before and after urea treatment, so we did not demonstrate the efficacy of urea. The main drawback in the study was the small population analysed.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-019 ALIROCUMAB AND EVOLOCUMAB: EFFECTIVENESS AFTER 3 YEARS OF FOLLOW-UP IN A REAL WORLD SETTING

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Background and importance Hypercholesterolaemia leads to a higher risk of atherosclerosis and cardiovascular events. Familial hypercholesterolaemia is more resistant to usual treatments. In 2015, the PCSK9 inhibitors (PCSK9I) alirocumab