

variables collected were: age, sex, HCV/HIV coinfection, genotype (G), degree of fibrosis (F), previous treatments, basal viral load (BVL), treatment duration, viral load at 12 weeks post-treatment, adherence and adverse effects (AEs). Effectiveness was evaluated according to SVR12.

**Results** Ninety-one patients (57.1% men) received treatment with DAAs, with a mean age of  $55.6 \pm 10.4$  years; 20 (22%) were coinfecting with HIV, and 55 (60.4%) had BVL  $>800$  000 UI/mL. The genotype distribution was: 29 (31.9%) G1a, 28 (30.8%) G1b, 1 (1.1%) G2, 15 (16.5%) G3 and 18 (19.8%) G4. Degree of fibrosis: 27 F0–F1, 16 F1, 10 F2, 15 F3, 2 F3–F4 and 14 F4; 7 (7.7%) patients were without data (WD). There were 75 (82.4%) naive patients; 6 had received treatment with DAAs (2 with two different lines).

Treatment distribution was: 36 (39.6%) glecaprevir/pibrentasvir, 28 for 8 weeks and 8 for 12 weeks; 29 (31.9%) elbasvir/grazoprevir, 28 for 12 weeks and 1 for 16 weeks; 23 (25.3%) sofosbuvir/velpatasvir for 2 weeks, 2 with ribavirin; 1 (1.1%) ledipasvir/sofosbuvir for 8 weeks; 2 (2.2%) sofosbuvir/velpatasvir/voxilaprevir for 12 weeks, both after relapse to two previous lines with DAAs.

The response observed was: glecaprevir/pibrentasvir 32 SVR12, 3 WD and 1 treatment suspension because of the patient's poor clinical condition; elbasvir/grazoprevir 26 SVR12 and 3 WD; sofosbuvir/velpatasvir 17 SVR12, 3 WD, 1 died (sepsis) and 2 virological failure (VF) (both G3, 1 F3, 1 F4, 1 relapsed to DAAs); ledipasvir/sofosbuvir: 1 SRV12; sofosbuvir/velpatasvir/voxilaprevir 2 SRV12. Of the total evaluable responses ( $n=80$ ), 78 (97.5%) SRV12 and 2 (2.5%) VF were observed.

**Conclusion and relevance** Our data confirm the effectiveness of the new DAAs, with SVR12  $>95\%$ , and are consistent with clinical trials which show that patients with G3 have the worst SVR12 rates.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

#### 4CPS-002 ANTICHOLINERGIC BURDEN IN CONSTIPATED PATIENT ADMITTED TO AN EMERGENCY DEPARTMENT

<sup>1</sup>A Plaza Diaz\*, <sup>1</sup>J Ruiz Ramos, <sup>1</sup>A Juanes Borrego, <sup>2</sup>M Blazquez Andion, <sup>1</sup>L Lopez Vinardell, <sup>1</sup>MA Mangués Bafalluy. <sup>1</sup>Hospital Sant Pau, Pharmacy, Barcelona, Spain; <sup>2</sup>Hospital Sant Pau, Emergency Department, Barcelona, Spain

10.1136/ejhp-pharm-2020-eahpconf.103

**Background and importance** Intestinal obstruction and constipation are frequent causes of attendance at the emergency services. Multiple studies have linked a high anticholinergic burden with constipation in elderly patients. However, its impact on patients attending the emergency department has not yet been clearly established.

**Aim and objectives** To evaluate the anticholinergic burden in patients who come to the emergency services for constipation, as well as its impact on re-attendance to these units.

**Material and methods** This was a retrospective observational study. Patients who consulted the emergency department for constipation or intestinal subocclusion were included (September 2018–June 2019). Drugs were collected from the electronic prescription. The anticholinergic burden of the medication was calculated using the anticholinergic burden index scale.<sup>1</sup>

A multivariate analysis was performed, including in the model parameters with a value of  $p < 0.2$  in the previous univariate analysis. The impact of continuous laxative treatment at discharge on the risk of re-attendance was evaluated. Statistical analysis was carried out using Stata V.2.0.

**Results** A total of 104 patients were included (mean age 77.1 ( $\pm 14.6$ ) years): 47 patients (56.6%) were classified as having a high cholinergic burden, 30 (36.1%) an intermediate burden and 6 (7.2%) a low burden.

In the univariate analysis, the variables associated with readmission at 30 days were age  $>80$  years, women, diabetes, residence destination, dementia and high cholinergic burden.

In the multivariate analysis, age  $>80$  years (0.34 (0.12–0.97)), a high anticholinergic burden (4.21 (1.07–16.5)) and dementia (3.26 (1.11–9.50)) were associated with readmission after 30 days.

Laxative prescription at discharge in the high burden group patients was not associated with a reduction in re-attendance (OR (95% CI) 0.86 (0.48–3.27)). In the intermediate burden group, a reduction in income was observed (OR (95% CI) 0.13 (0.015–0.99)).

**Conclusion and relevance** A high anticholinergic burden at discharge from the emergency department in elderly patients who consult for constipation was closely related to re-attendance at 30 days. Hence these patients must be considered high risk and specific interventions established.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Hilmer SN. Calculating and using the drug burden index score in research and practice. *Expert Rev Clin Pharmacol* 2018;11:1053–5.

No conflict of interest.

#### 4CPS-003 LIRAGLUTIDE IN CHRONIC INTESTINAL FAILURE: OVERVIEW AND CASE REPORT

<sup>1</sup>M Scaldaferrì\*, <sup>1</sup>E Castellana, <sup>2</sup>M Ippolito, <sup>3</sup>FD Merlo, <sup>3</sup>U Aimasso, <sup>3</sup>A De Francesco, <sup>1</sup>F Cattell. <sup>1</sup>AOU Citta' Della Salute E Della Scienza Di Torino, Pharmacy, Turin, Italy; <sup>2</sup>AOU Citta' Della Salute E Della Scienza Di Torino, Internal Medicine 3 U, Turin, Italy; <sup>3</sup>AOU Citta' Della Salute E Della Scienza Di Torino, Dietetics and Clinical Nutrition, Turin, Italy

10.1136/ejhp-pharm-2020-eahpconf.104

**Background and importance** Chronic intestinal failure (CIF) is a rare pathology, included in the 2013 Orphanet list. Parenteral nutrition is a lifesaving and often lifelong therapy because of nutrients loss and electrolyte and fluids imbalance related to impairment in intestinal absorption and high daily stoma output. Antimotility and antisecretory drugs can reduce faecal output and promote better nutrient and fluid absorption. An impaired hormonal 'ileo-colonic brake' may further worsen imbalance in patients with end jejunostomy short bowel syndrome (SBS-IF). Intestinal adaptation can occur in the remaining part of the bowel through secretion of gut trophic peptide hormones, such as glucagon-like peptide (GLP) 2 and 1. With large enteral resections, GLP secretion is virtually absent, and treatment with GLP analogues could be useful. Liraglutide is a GLP-1 analogue which reduces gastric hypersecretion and slows gastric emptying. In an open label, 8 week pilot study, liraglutide significantly reduced the ostomy wet weight output by  $474 \pm 563$  g/day ( $p=0.049$ ).

**Aim and objectives** The primary aim of the study was to evaluate the effect of liraglutide on faecal output in patients with SBS-IF and a high faecal output.

**Material and methods** Data on faecal output, March 2018 to September 2019, were collected for patients with SBS-IF and a high faecal output, despite treatment with antimotility and antisecretory drugs, who received liraglutide to reduce ostomy output.

**Results** Ten patients received liraglutide at a standard dose. Small bowel length was <140 cm. Pretreatment faecal output was 3230 mL/day. Two patients did not respond to treatment, while the remaining eight patients (80%) achieved a post-treatment faecal output of 1983 mL/day, with an average reduction of 1402 mL/day (-43%) after 8 weeks of therapy. One patient discontinued therapy following intestinal recanalisation, while therapy is ongoing in seven patients. Liraglutide was well tolerated and all patients reported an improvement in quality of life.

**Conclusion and relevance** Liraglutide seems to have a place in the limited treatment armamentarium available for patients with SBS-IF, who have a significantly impaired quality of life.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

- Hvistendahl M, *et al.* Effect of liraglutide treatment on jejunostomy output in patients with short bowel syndrome: an open-label pilot study. *J Parenter Enteral Nutr* 2018;**42**:112–121.

No conflict of interest.

4CPS-004

#### EVALUATION OF THE USE OF HYDROCORTISONE, VITAMIN C AND THIAMINE FOR THE TREATMENT OF SEPTIC SHOCK

<sup>1</sup>M Martín Cerezuela\*, <sup>2</sup>E Sancho Ferrando, <sup>1</sup>I Beltran Garcia, <sup>1</sup>M Centelles Oriá, <sup>2</sup>E Villarreal Tello, <sup>2</sup>M Gordon Sahuquillo, <sup>2</sup>A Castellanos Ortega, <sup>2</sup>P Ramirez Gallego, <sup>1</sup>JL Poveda Andres. <sup>1</sup>Hospital Universitario Y Politécnico La Fe, Pharmacy, Valencia, Spain; <sup>2</sup>Hospital Universitario Y Politécnico La Fe, Icu, Valencia, Spain

10.1136/ejpharm-2020-eahpconf.105

**Background and importance** The combination of thiamine/vitamin C/hydrocortisone has recently emerged as an adjunctive therapy for patients with septic shock (SS)

**Aim and objectives** To evaluate the use of the combination as a complementary treatment for SS.

**Material and methods** A retrospective, observational, cohort study was carried out in critically ill patients diagnosed with SS in an ICU between January 2018 and September 2019. Patients were divided into two cohorts: cohort A (had received standard therapy of intensive fluids, empirically broad spectrum antibiotics, prevention of vein thrombosis and norepinephrine as vasopressor therapy) and cohort B (in addition had received intravenous treatment with the combination). Demographic variables (age, gender) and clinical variables (comorbidities, SAPS-III, origin of sepsis, need for invasive mechanical ventilation (IVM) and extracorporeal membrane oxygenation (ECMO), baseline procalcitonin, acute renal failure and blood culture positive) were collected. Dosage and duration of combination treatment were collected in cohort B. Hospital mortality, length of stay (LOS), duration of IVM, requirement for renal replace technique (RRT) and duration of vasopressor treatment were assessed. Comparisons between the groups were performed with STATA V.14.2

**Results** A total of 115 patients with SS were included (59 in cohort A; 56 in cohort B). All demographic and baseline clinic characteristics were not significantly different between the groups except for immunosuppression (41 vs 28,  $p=0.048$ ). Patients in cohort B received the combination a

median of 3 (1–26) days at doses: vitamin C 1.5 g/6 hours (62.5%), 1 g/6 hours (16.1%), 1 g/24 hours (16.1%) and 0.5 g/24 hours (5.3%); thiamine 200 mg/12 hours (55.4%), 100 mg/24 hours (26.8%) and 100 mg/12 hours (17.8%); and hydrocortisone 50 mg/6 hours (53.6%) and 100 mg/8 hours (46.4%). Twenty-one patients received decreasing dose regimens. In 23 patients in cohort A, steroid treatment was necessary. The combination was prescribed on admission in 80.7% of patients, and in 11 patients the prescription was delayed for a median of 7 (2–16) days. No differences in mortality were observed (24 vs 21,  $p=0.450$ ). Patients in cohort B required more IVM than those in cohort A (31 vs 19,  $p=0.014$ ) for more days (19.42 vs 2.17,  $p=0.055$ ), more RRT (27 vs 16,  $p=0.019$ ) and LOS (10.64 vs 6.37,  $p=0.02$ ).

**Conclusion and relevance** According to our results, it cannot be concluded that adding hydrocortisone/vitamin/thiamine to standard treatment reduces mortality, LOS or duration of vasopressors. However, there was a tendency to treat the most vulnerable patients (immunosuppressed patients, refractory sepsis and RRT). Variable dosage was used, and as a result of the study, a protocol was developed in the unit to standardise the use of the combination.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-005

#### RISK FACTORS FOR PERSISTENCE AND TOLERANCE OF COW'S MILK ALLERGY

<sup>1</sup>JM Giraldez Montero\*, <sup>1</sup>G Duran Piñeiro, <sup>1</sup>I Varela Rey, <sup>2</sup>R Leis Trabazo, <sup>1</sup>Zarra Ferro. <sup>1</sup>Complejo Hospitalario Universitario De Santiago De Compostela, Pharmacy Department, Santiago De Compostela, Spain; <sup>2</sup>Complejo Hospitalario Universitario De Santiago De Compostela, Paediatric Department, Santiago De Compostela, Spain

10.1136/ejpharm-2020-eahpconf.106

**Background and importance** Cow's milk protein allergy (CMPA) is universally the most common food allergy in the first years of life, and the incidence has increased over the past few years. The presence of CMPA has important repercussions for patients and their families as it diminishes their quality of life.

**Aim and objectives** Our aims were to characterise our population of children with CMPA and to identify predictive factors for the persistence of this allergy.

**Material and methods** This was a retrospective observational study in 168 children diagnosed with CMPA at the gastroenterology and nutrition unit undergoing treatment with special formulas for the management of CMPA, between 1 January and 31 March 2017, at the University Clinical Hospital of Santiago de Compostela. Clinical variables and complementary tests, perinatal and nutritional factors, symptoms and type of hydrolysed formula used was recorded. Children were followed-up to 2 years of age. A logistic regression analysis was used to investigate independent predictive factors for the persistence of CMPA beyond the age of 1 year of age.

**Results** A total of 88 males (52.4%) with a mean age at diagnosis of CMPA of  $3.27 \pm 2.82$  months were studied: 31% did not have a differentiated diagnosis; 89.3% were born after 37 weeks' gestation; 20.2% by caesarean section; 46.4% were breastfed; 36.1% were fed artificially; 17.5% had mixed feeding; and 47.1% had a first or second degree family history.

Patients who began with gastrointestinal and/or cutaneous symptoms were observed to take longer to acquire tolerance