Results The number of treated patients (10 535) decreased by 33.33% from January 2017 to December 2018. Implementation of the new distribution modality of off-label LMWH led to a decrease in the number of packs supplied by the traditional distributor (−68.80%) compared with a marked increase (+428%) in those supplied by private pharmacies on behalf of the LHA. Patients who received prescriptions for heparins off-label tripled in 2018 compared with 2017; the DDD×1000ab/day decreased by 67.50% for traditional distributors and increased by >500% for private pharmacies. This led to an important reduction in costs for the NHS, with a decrease in the cost of LMWH of 72.63% in our territory.

Conclusion and relevance The significant increase in off-label LMWH prescriptions carried out following the preparation of a therapeutic plan made it possible to strengthen the monitoring of prescriptions as the indication for which the drug was suggested must be highlighted by reporting specific codes on the prescriptions. The renegotiation of the prices of drugs provided by private pharmacies on behalf of the LHA is part of a pharmaceutical governance plan that results in a reduction of costs in favour of the patient’s health, as demonstrated by our study.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-008 RESISTANCE TO SODIUM HEPARIN TREATMENT OR TREATMENT FAILURE TO THE EQUIVALENT ANALOGUE?

A Lezzì1, I Clerici, D Villa, E Omodeo Salè. 1Centro Cardiologico Monzino, Servizio Di Farmacia Ospedaliera, Milano, Italy; 2Centro Cardiologico Monzino, Hospital Pharmacy, Milan, Italy

Background and importance The most frequent cause of heparin resistance is lack of antithrombin (AT). However, there are non-AT mediated heparin resistance cases in the literature but they are less prevalent.

Aim and objectives The aim of the study was to investigate if we had managed the onset of non-AT mediated heparin resistance or a treatment failure to an equivalent analogue during cardiac surgery.

Material and methods A 53-year-old, non-smoker, hypertensive Caucasian man was studied. In December 2013, a heart murmur and mitral regurgitation was found. In July 2014, correction of mitral valve disease by surgery was indicated but surgery was postponed for personal reasons. On 2 May 2019, valvuloplasty was performed and a heparin bolus of 25 000 IU was administrated (Pharepa). Activated clotting time (ACT) was 120 which was not adequate for establishment of extracorporeal circulation.

Antithrombin III and an additional dose of heparin were administered but the ACT value was the same. The procedure was delayed due to further investigation.

On 8 May 2019, haematology counselling was requested. AT levels were within the limits (114%) and factor VIII was at the upper limits (142%). A test dose of heparin Epsoclar was recommended to assess the biological response because of suspected heparin resistance.

Results On 4 June 2019, tests were performed with increasing doses of Epsoclar which showed an appropriate dose–response correlation. On 10 July 2019, after a new Epsoclar dose–response test, valvuloplasty surgery was performed. Systemic heparinisation was carried out with Epsoclar and the anticoagulant action was assessed. Once the correct ACT was obtained, the extracorporeal circulation was implanted with subsequent intervention.

Conclusion and relevance This clinical case showed a lack of therapeutic effect after administration of Pharepa heparin. The results of the dose–response study showed an adequate correlation with exclusion of non-AT mediated heparin resistance. Tests conducted on administered heparin analogues showed that heparinisation failure occurred with Pharepa while verification tests included the use of Epsoclar, also used during the second surgery. Of the 38 adverse drug reaction reports included in the National Pharmacovigilance Network for Pharepa, 16.7% refer to a lack of therapeutic effect of the medicine. All adverse drug reactions were severe and two led to patient death. The case report highlights how differences in response between synthesis analogues can exist and underlines the importance of proceeding with further investigation in cases of diagnostic doubt.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-009 EVALUATION OF DIRECT ORAL ANTICOAGULANT USE IN PATIENTS ADMITTED FOR UPPER GASTROINTESTINAL AND INTRACRANIAL HAEMORRHAGES IN THE EMERGENCY SERVICE

P Miralles-Abors, M Flint-Sureda, A Perez Contel1, S Fernández-Molina, A Barragán Muñoz, M Gómez-Valent. Hospital Universitari Parc Taulí Sabadell, Pharmacy Department, Sabadell, Spain

Background and importance Upper gastrointestinal haemorrhage (UGIH) and intracranial haemorrhage (ICH) cause emergency service (ES) admissions. Glucocorticoids (GC), non-steroidal anti-inflammatory drugs (NSAID), selective serotonin reuptake inhibitors (SSRI), serotonin and norepinephrine recruitment inhibitors and platelet antiaggregants (PAA) increase the risk of UGIH and ICH when taken concomitantly with direct oral anticoagulants (DOACs). Patient age and other comorbidities (gastric lesions, liver disease, coagulopathies and hypertension) also enhance bleeding probability. In addition, some haemorrhages can be caused by a misuse of anticoagulant drugs.

Aim and objectives To describe the prevalence of DOAC use in admissions for UGIH and ICH in the ES. To assess dosing and indication appropriateness of DOACs and to analyse the presence of risk factors such as concomitant drugs and comorbidities.

Material and methods A Retrospective, descriptive, observational study was conducted in a university hospital. We included 14 281 patients admitted to the ES during 2018 and selected those with a diagnosis of UGIH and ICH. Data collected from patient healthcare records were age, sex, diagnosis,