INFLUENCE OF AUGMENTED RENAL CLEARANCE IN LONG-TERM EFFECTIVENESS OF ADALIMUMAB IN ULCERATIVE COLITIS AND INFLUENCE OF THE FIRST-LINE TREATMENT

B. Sanchez*, JM Caro Teller, J Gonzalez Barrion, A Hernandez Ramos, Á Gonzalez Gomez, MA Bruní Montero, A Castro FRONTIÉN, JM Ferrari Piquer. Hospital Universitario de Puerto Real, Farmacia Hospitalaria, Cádiz, Spain

10.1136/ehjpharm-2022-eaph.284

Background and importance Linezolid-related haematological toxicity has been described to be a major cause of treatment withdrawal and transfusion requirements, especially in renal injured patients (<60 mL/min/1.73 m²).

Aim and objectives To evaluate the influence of augmented renal clearance (ARC) in the incidence of haematological toxicity as part of the antimicrobial stewardship programme in which our Pharmacy Department participates.

Material and methods A retrospective, observational study was conducted. Hospitalised patients aged >18 years treated with oral or intravenous linezolid for ≥5 days during the period 2014–2019 in a university hospital were included. Two groups were compared: ARC patients with a filtration rate of ≥130 mL/min/1.73 m² (≥120 mL/min/1.73 m² for women) versus reference patients (60–90 mL/min/1.73 m²) according to the CKD-EPI formula. Exclusion criteria: critically ill, ≤100×10³/mm³ platelets or <10 mg/dL haemoglobin as baseline.

Data were picked by electronic system. Demographic (gender, age) and clinical characteristics (duration of treatment, site of infection, haematological parameters (platelets, haemoglobin and neutrophils) at duration of therapy, concomitant immunosuppressant therapies and chemotherapy <6 months) were registered.

Haematological toxicity was defined as a decrease of 25% in platelets, 25% in haemoglobin and/or 50% in neutrophils from baseline.

Fisher’s exact test was performed by XLSTAT program. Level of significance p<0.05.

Results 92 patients were studied: 46 ARC patients (54% male) median age 39 (18–74) years and 46 reference patients (71% male), median age 57 (21–79) years. Median duration of treatment was 7 (5–28) days and 9 (5–25) days, respectively. Site of infection: 58.7% respiratory tract infections (RTIs), 21.7% soft tissues and 13% bacteremia in the first group and 48.3% soft tissues, 26% RTIs and 21.7% bacteremia in the second group.

In the ARC population, 8.7% were under immunosuppressant treatment and 8.7% had received chemotherapy <6 months vs 17.4% and 8.7% in the reference population.

Haematological toxicity was observed in 6.5% ARC patients vs 28.3% (p=0.006). Thrombocytopenia 4.4% vs 19.6% (p=0.024), anaemia 2.2% vs 13% (p=0.049) and neutropenia 2.2% vs 13% (p=0.049). 8.7% patients in the reference group required transfusion and none of ARC patients.

Conclusion and relevance Our findings suggest an association between ARC and a lower incidence of linezolid-related haematological toxicity.

REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of interest No conflict of interest