

#### 4CPS-124 ADHERENCE TO SELECTIVE IMMUNOSUPPRESSIVE DRUG TREATMENTS IN PATIENTS WITH INFLAMMATORY IMMUNE MEDIATED DISEASES

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**Background and importance** The paradigm of patients with immune mediated autoimmune diseases has changed with the introduction of biological medicines. The correct use of these drugs is necessary to guarantee their effectiveness.

**Aim and objectives** To analyse adherence in immune mediated diseases patients treated with selective immunosuppressive drugs (adalimumab or etanercept) and to establish a link with patient characteristics and treatment duration.

**Material and methods** A retrospective study in a third level hospital was conducted in patients receiving treatment with adalimumab or etanercept from January to December 2018. Adherence was measured via the medication possession ratio (MPR) over 1 year. Variables recorded were sex, age, pathology, previously taken biological drug treatments, treatment duration in days and number of auto-injectors. Statistical analysis of the data was made with SPSS.

**Results** The sample population was 146 patients, 55.5% (81) men, mean age  $53.58 \pm 12.47$  years, and 55.5% were treated with adalimumab, 39.7% with etanercept and 3.9% with the biosimilar etanercept. Medium treatment duration was  $5.07 \pm 3.09$  years. The main pathologies and frequency were: rheumatoid arthritis in 32.2% (47) of patients, spondyloarthropathy in 18.5% (27), psoriatic arthritis in 17.8% (26), psoriasis in 13.7% (20), Crohn's disease in 11% (16), ulcerative colitis in 4.8% (7) and other pathologies in 2.1% (3). Regarding adherence, the overall rate was 89.3%. For each patient group, adherence was 86.24% in patients with rheumatoid arthritis, 89.36% in patients with spondyloarthropathy, 94.5% in patients with psoriatic arthritis, 84.11% in patients with psoriasis, 94.63% in patients with Crohn's disease, 93.01% in patients with ulcerative colitis, 84.38% in patients with Verneuil's disease and 84.11% in patients with systemic lupus erythematosus. In total, 78.1% (114) of all patients were adherent (MPR  $\geq 80\%$ ). We did not observe statistically relevant associations between any of variables except for lower adherence to treatment and longer treatment duration ( $p=0.038$ ).

**Conclusion and relevance** Patients had good adherence to selective immunosuppressant treatments according to the MPR method. Sex, pathology or drug type were not related to absence of adherence. However, lack of adherence was observed the longer treatment lasted, which implies that it would be useful to have closer pharmacotherapeutic monitoring of this kind to reinforce adherence in patients.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

#### 4CPS-125 ACCEPTANCE OF PHARMACOKINETIC RECOMMENDATIONS FOR EVEROLIMUS IN RENAL TRANSPLANT PATIENTS

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**Background and importance** Pharmacokinetic monitoring of the transplanted patient is essential to keep blood concentrations of immunosuppressive drugs in range, and to reduce the risk of organ rejection and the adverse effects associated with these drugs.

**Aim and objectives** To assess the degree of acceptance by the nephrology service of recommendations made by the clinical pharmacokinetics unit after monitoring everolimus blood concentrations at a third level general university hospital.

**Material and methods** This was a retrospective observational study in renal transplant patients with at least two everolimus determinations between January 2016 and September 2019. Patients were identified from the Gestlab programme and data collected were: age, sex, date of testing, concomitant immunosuppressive treatment, blood concentrations and pharmacokinetic recommendations. The number of blood determinations per patient, percentage of pharmacokinetic recommendations accepted by the physician and the proportion of values lower and higher than the established therapeutic range were evaluated; the target therapeutic interval for monotherapy is 6–10 ng/mL and in combination with calcineurin inhibitors is 3–8 ng/mL.

**Results** Pharmacokinetic monitoring was performed in 49 patients, 59% men, with an average age of  $60 \pm 12$  years and an average of  $9 \pm 5.3$  everolimus determinations. In 65.3% of patients, treatment was with everolimus and tacrolimus simultaneously. A total of 443 samples were analysed, with a dose adjustment required in 34.7%. The average everolimus percentages lower and higher than the target range were 23% and 11.3%, respectively. The dosing recommendations of these patients were accepted in 69% of cases. After this adjustment, 66.1% of patients tested showed drug concentrations in range. Of the total recommendations not accepted, 31% of medical actions differed from the recommendation in the prescribed final dosing regimen.

**Conclusion and relevance** During the study period, posology individualisation was necessary in almost 35% of the analyses performed by the clinical pharmacokinetics service, with the pharmacokinetic recommendations accepted by the prescriber in more than 60% of cases.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

#### 4CPS-126 A POPULATION PHARMACOKINETIC MODEL OF ADALIMUMAB IN A COHORT OF PAEDIATRIC PATIENTS WITH INFLAMMATORY BOWEL DISEASE: A PRELIMINARY ANALYSIS

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**Background and importance** Therapeutic drug monitoring is useful to optimise adalimumab therapy in patients with inflammatory bowel disease (IBD).