to 8.31) and 7.61 ng/mL (95% CI: 7.35 to 7.87). Mean number of plasmatic determinations: 13.71 (95% CI: 12.89 to 14.54), 4.72 (95% CI: 4.18 to 5.26), 5.24 (95% CI: 4.66 to 5.83) and 5.45 (95% CI: 4.87 to 6.04). Percentage of concentrations lower than 5 ng/mL: 13.51% (95% CI: 11.28 to 15.74), 9.28% (95% CI: 6.49 to 12.06), 13.12% (95% CI: 9.73 to 16.51) and 12.81% (95% CI: 9.35 to 16.27). Mean CV: 43.55% (95% CI: 41.29 to 45.81), 25.41% (95% CI: 23.09 to 27.74), 25.38% (95% CI: 22.99 to 27.77) and 24.43% (95% CI: 22.11 to 26.75). Percentage of patients with CV >30%: 80.25% (95% CI: 75.21 to 85.29), 31.75% (95% CI: 25.42 to 38.09), 29.86% (95% CI: 23.63 to 36.08) and 30.48% (95% CI: 23.82 to 37.14).

Conclusion FKplasm and IPV during induction are higher than in EM and LM. However, patients with CV >30% remain in the maintenance periods between 29.9% and 31.8%, and with values <5 ng/mL between 9.3% and 13.1% which would justify a greater need for pharmacokinetic monitoring and therapeutic control, in order to preserve a longer graft survival and to minimise the events of pharmacological adverse reactions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Thanks to all authors for their involvement.
No conflict of interest.

4CPS-150

EVALUATION OF INTRA-PATIENT VARIABILITY OF THE TACROLIMUS PLASMATIC LEVELS IN DIFFERENT PERIODS AFTER LIVER TRANSPLANT

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10.1136/ejhp-pharm-2019-eahpconf.299

Background Immunosuppressive therapy in liver transplant patients (LTP) is divided into several temporary periods after surgery. The priority is to avoid acute rejection in the earliest stages, and advancing in time, to preserve a longer graft survival and to minimise pharmacological adverse events.

Purpose To assess the mean concentration, intra-patient variability (IPV) of serum levels of tacrolimus (FKs) and their evolution during the different periods after liver transplant to evaluate the therapeutic situation of LTP.

Material and methods Observational retrospective study since January 2015, with a minimal post-transplant follow-up of 1 year. Clinical data was collected from the hospital's medical records.

Variables of the study were calculated considering different periods of liver post-transplant according to our hospital's medical protocol: 0–1 month (S1), 1–3 months (S2), 3–6 months (S3), 6–9 months (S4) and 9–12 months (S5). FKs mean, coefficient of variation (CV), proportion of patients with CV >30% (CV30), estimated daily area under the curve (AUCd) and proportion of FKs values <5 ng/mL (P5) per patient were calculated. CV was used to characterise the IPV. Therapeutic control was considered inadequate if CV values were >30% or P5 >20%.

Variance analysis and the Kruskal–Wallis test were used to compare quantitative variables (SPSS).

Results Eighty-eight patients and 1206 measures of FKs were included. The values of variables analysed – mean FKs, P5, estimated AUCd and CV30 – were expressed in the temporal order of the follow-up period – S1, S2, S3, S4, S5 – as follows:

Mean FKs: 7.5 ng/mL (95% CI: 7.0 to 8.0), 8.0 ng/mL (95% CI: 7.6 to 8.6), 7.0 ng/mL (95% CI: 6.5 to 7.4), 6.5 ng/mL (95% CI: 6.0 to 7.0) and 6.5 ng/mL (95% CI: 5.9 to 7.1).

P5: 30.0% (95% CI: 25.0 to 35.0), 18.4% (95% CI: 12.7 to 24.2), 21.4% (95% CI: 14.2 to 28.6), 23.3% (95% CI: 15.1 to 31.4) and 29.5% (95% CI: 19.2 to 39.8).

AUCd: 7.1 ng/mL.day (95% CI: 6.5 to 7.7), 7.8 ng/mL.day (95% CI: 7.1 to 8.5), 6.1 ng/mL.day (95% CI: 5.5 to 6.7), 7.9 ng/mL.day (95% CI: 6.5 to 9.3) and 9.1 ng/mL.day (95% CI: 7.4–10.9).

CV30: 89.8% (95% CI: 83.3 to 96.2), 41.2% (95% CI: 30.5 to 51.9), 37.7% (95% CI: 27.1 to 48.2), 13.9% (95% CI: 6.1 to 21.7) and 21.5% (95% CI: 11.3 to 31.8).

Technically, for each period: 89.8%, 43.5%, 44.7%, 27.9% and 40% patients had poor FKs control levels (CV >30% or P5 >20%).

Mean FKs, P5, AUCd and CV30 observed varied widely among periods, achieving statistical differences for almost all parameters: $p < 0.001$, $p < 0.001$, $p = 0.002$ and $p < 0.001$.

Conclusion CV30 and P5 during the earliest periods after liver transplant remain higher than in the latest, and up to 89.8% of patients have a poor therapeutic control. The detection of patients with high IPV or analytical values <5 ng/mL during the different stages of liver post-transplant could justify a greater need for therapeutic control, since these are associated in the long term with a worse prognosis, leading to chronic rejection and/or greater pharmacological toxicity.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Thanks to all authors for their involvement.
No conflict of interest.

4CPS-151

INFLUENCE OF THE ROUTE AND PHARMACEUTICAL PREPARATION IN INTRA-PATIENT VARIABILITY OF TACROLIMUS SERUM LEVELS IN THE LIVER TRANSPLANT PATIENT

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10.1136/ejhp-pharm-2019-eahpconf.300

Background In the earliest stages, immunosuppressive therapy in liver transplant patients (LTP) is targeted to avoid acute rejection, to preserve graft survival and to minimise the risk of pharmacological adverse reactions. The use of different administration routes or immediate-prolonged release preparations could influence tacrolimus serum levels (FKs) and variability.

Purpose To assess the mean concentration and the intra-patient variability (IPV) of FKs after their administration through immediate-prolonged release preparations and/or different administration routes in LTP.

Material and methods Observational retrospective study including LTP within 2015–2017.

Clinical data was collected from the hospital's medical records, including: type of transplant, date of surgery, tacrolimus pharmaceutical form (TacPP), administration route and FKs values within 1 month after liver transplant.

FKs mean levels, coefficient of variation (CV), proportion of patients with CV >30% (CV30) and proportion of FKs values lower than 5 ng/mL (P5) per patient were calculated.