L04 - Immunosuppressive agents

4CPS-150

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

S. García García [1] , C. Dopazo Taboada [2] , M.B Aller Hernández [3] , I. Bilbao Aguirre [2] , E. Pericas Bosch [3] , J.B. Montoro Ronsano [1]

[1] Pharmacy Service, [2] Hepatolobiliar Surgery Service, [3] Artificial Intelligence Information Service, Vall d'Hebron University Hospital, Barcelona, Spain.

Purpose

To assess the mean concentration, the intra-patient variability of serum levels of tacrolimus (FKs) and their evolution along different periods after liver transplant.

Material and Methods

Observational retrospective study: January 2015 – minimum post-transplant follow-up of 1 year.

Liver transplanted patients > 18 years old

Liver transplat	S1	S2	S3	S4	S5
	0 - 1 month	1 - 3 months	3 - 6 months	6 - 9 months	9 - 12 months

Priority: To avoid the acute rejection → To preserve a longer graft survival + ⇩ Adverse reactions

Analized variables

- Mean of tacrolimus plasmatic concentrations
- Coefficient of variation
- Proportion of pacients with coefficient of variation superior to 30%
- Percentage of values lower than 5 ng/ml (P5)
- Area under the concentration-estimated time

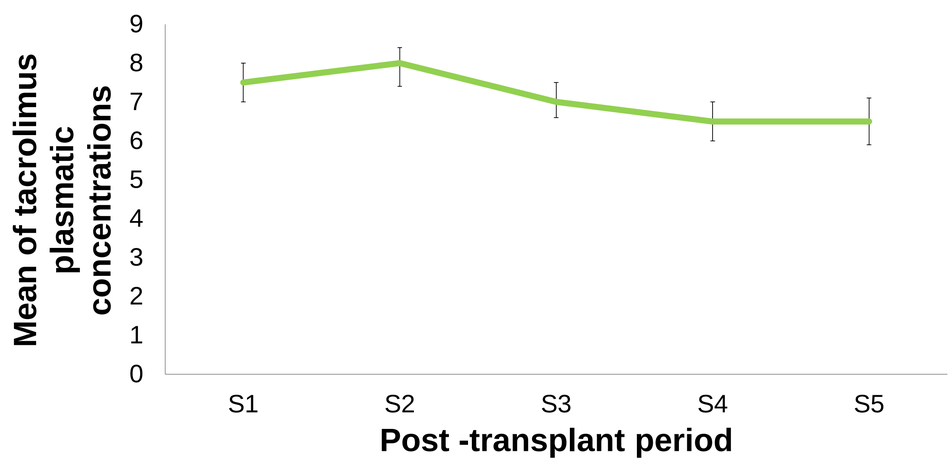
⇨ To describe the intra-patient variability was used the coefficient of variation

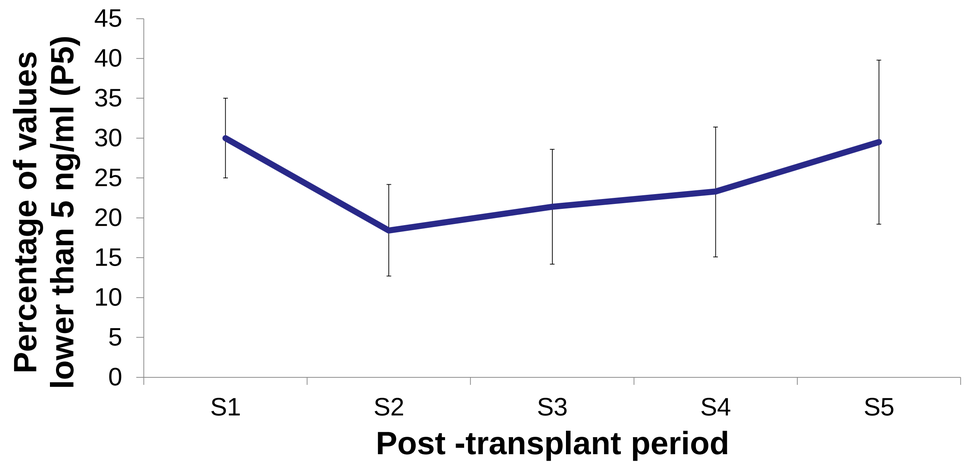
⇨ Therapeutic control is considered inadequate if intra-patient variability is superior to 30 % or the P5 is superior to 20 %.

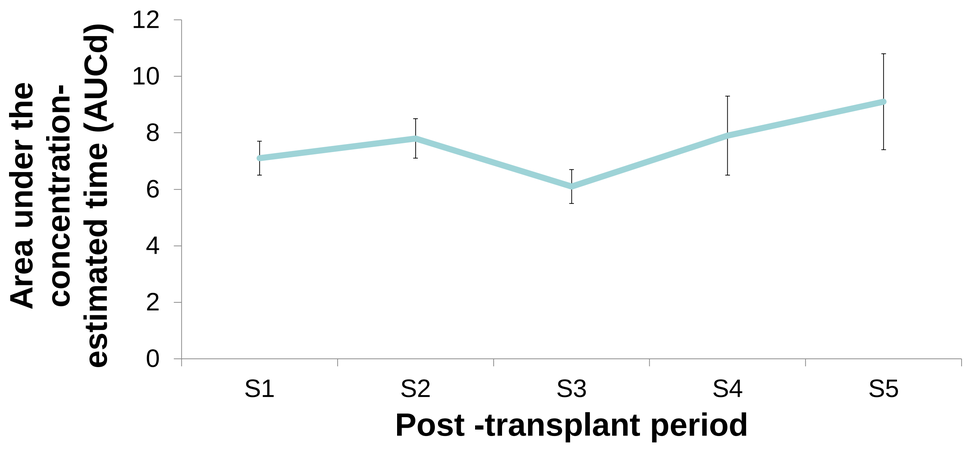
Results

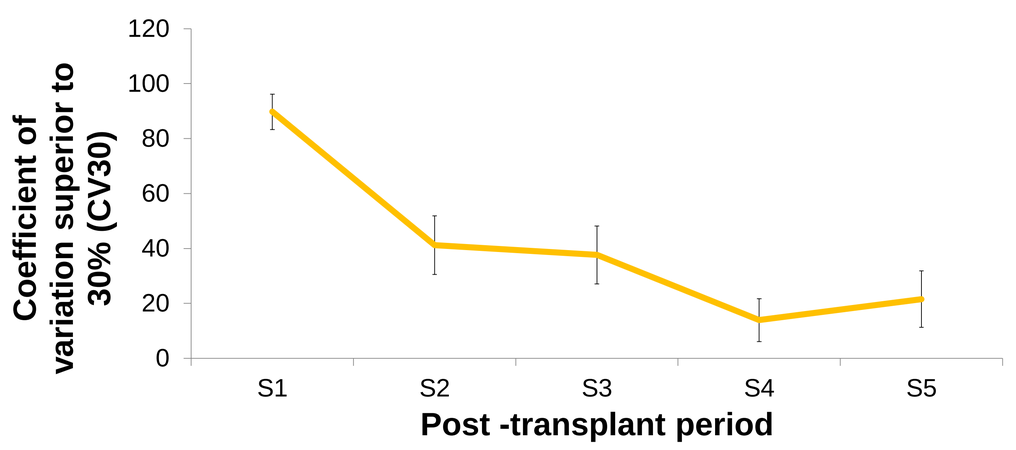
88 patients

* Range of therapeutic tacrolimus plasmatic levels values is established between 5-20 ng/ml









Tecnically, for each period: 89.8%, 43.5%, 44.7%, 27.9% and 40% patients had poor control of serum levels of tacrolimus.
Mean of serum levels of tacrolimus , 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

Taking into account the limitation of this study, the early detection of patients with high intra-patient variability or analytical values lower than 5 ng/mL along the different stages of liver post-transplant could justify a greater need for pharmacokinetic monitoring and therapeutic control.

http://www.eahp.eu/24-4CPS-150