

## **Reasons for Non-Adherence in Liver Transplant Patients in Uruguay** Noceti O<sup>1</sup>; Deleón N<sup>1</sup>; Woillard J-B<sup>2</sup>; Viñoly MC<sup>1</sup>; Gerona S<sup>1</sup>.

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### **Background**

Non-adherence in liver recipients account for a mortality rate of 10%. Medication regimen complexity also attempts against adherence. Furthermore, socio-economic and cultural factors shape patient attitudes toward medications, as well as a variety of intra-individual factors. Slight deviations to IMSD regimen associate with an increased risk of under or over exposure, graft dysfunction, rejection/infection episodes and even graft loss, which boost health system expenses and impacts negatively on patient QoL, financial and working status. As non-adherence is multidimensional, identifying the contributing factors is crucial to enhance clinical success. The aim of the study was: (i) to assess non-adherence prevalence in patients of the National Program of Liver Transplantation, (ii) to identify which are the covariates that could explain the causes of this behavior and (iii) if IMSD non-adherent patients experience worst outcomes.

### **Methods**

174 liver transplant patients' behavior and clinical outcomes were monitored during the first half of 2017 to the end of 2018 regarding cumulative hospital readmissions and rejection episodes, social status, psychological trends, medication regimen, IMSD concentrations through levels and dietary habits.

Recipients were considered non-adherents if: (i) they exhibited at least two consecutive deviation to indicated drugs, (ii) they missed two or more clinical or laboratory test appointments without notice and (iii) tacrolimus through levels were sustained around or below 2 mg/l not justified by dose decrease.

### **Results**

Recipients mean age was 46 years with a time since transplantation of 7.6 years. 86 recipients (49%) were non-adherent: 30 (17%) to immunosuppressant drug regimen. 66 (38%) missed clinical appointments and 34 (20%) laboratory tests by no reasons; 20 (12%) exhibited tacrolimus through levels below or equal 2 mg/l. The main reasons of disruptive behaviors obeyed to delayed intake (35%) and omitted doses (32%).

Multivariate analysis highlighted depression as the covariate contributing to non-adherence. Non-adherent patients experienced more rejection episodes (29% vs 11%) and hospitalizations (51% vs 34%).

### **Conclusions**

Non-adherence prevalence is consistent with data reported worldwide. Depression prevents patient from selfcare. Reduced exposure is mostly explained by skipped doses or delayed intake and leads to worst outcomes. Further strategies are needed to overcome this issue.

**Key Words:** adherence, non-adherence, liver transplantation, immunosuppressive drugs.