



TTS2024



Tacrolimus-related Neurotoxicity in Liver Transplant – Is it safe to revert to tacrolimus from cyclosporine?

Utpala Uday, Gomathy Narasimhan,

Souradeep Dutta, Ashwin Rammohan, Dinesh Jothimani,

Mohamed Rela

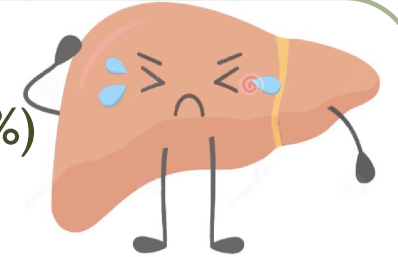


Institute of liver disease and transplantation, Dr. Rela Institute and Medical Centre, Chennai, India

Need for the Study

- Neurotoxicity of tacrolimus
 - Major dose and drug-limiting adverse effect
 - Most common reason for discontinuation
- Immunosuppression with cyclosporine is sub-optimal
 - up to 10% higher rates of graft loss

Neurotoxicity higher in
Liver transplant (10 to 30%)



Than in other solid
organ transplants

Study Design



Retrospective data
analysis



Single centre



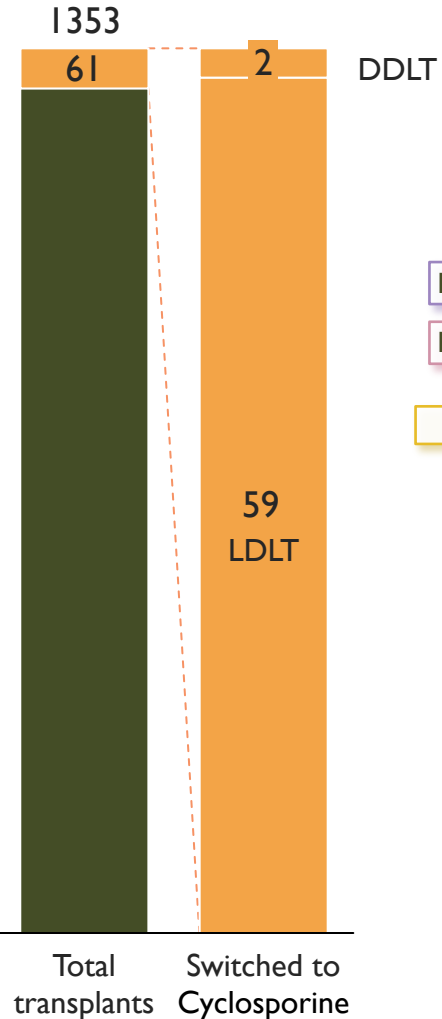
Liver transplant
recipients



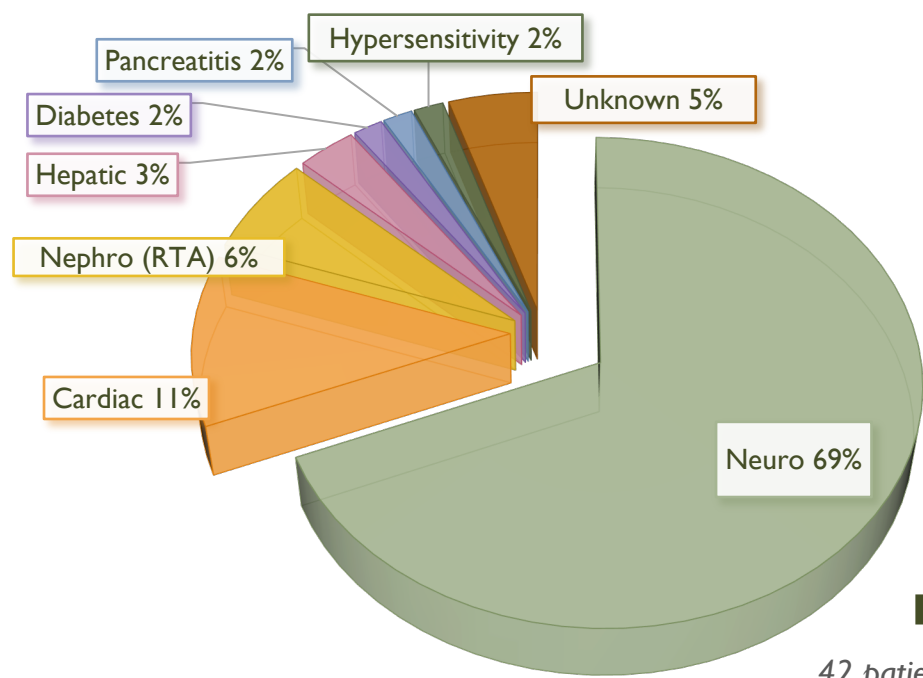
2019 to 2023

Institution Immunosuppression Protocol – Initially Triple therapy with **Tacrolimus** + Mycophenolate Mofetil + Steroid. Later, tapering down to Tacrolimus monotherapy. Use of Cyclosporine only in case of Tacrolimus toxicity/intolerance.

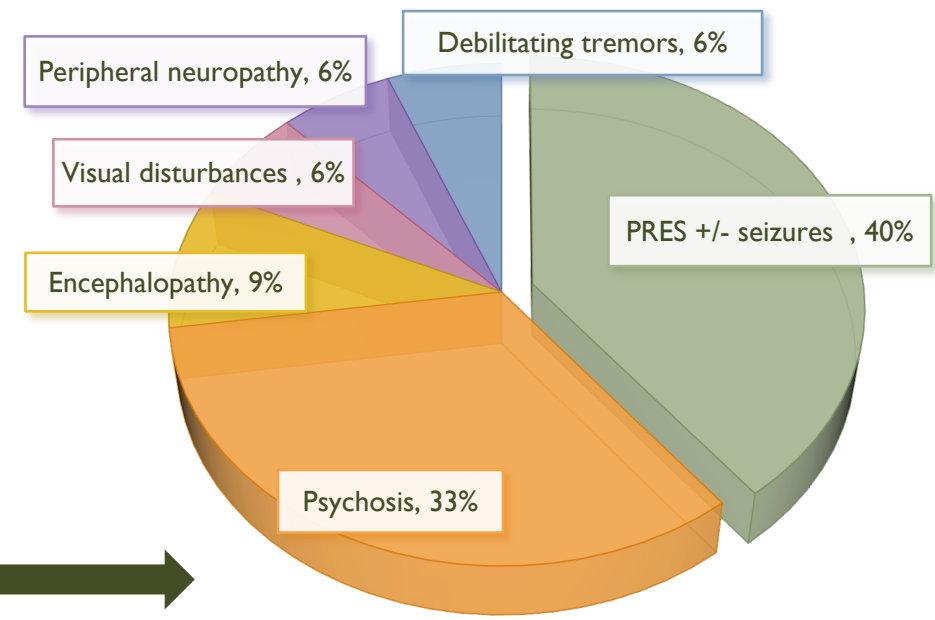
Study Results



Causes of Switch to Cyclosporine



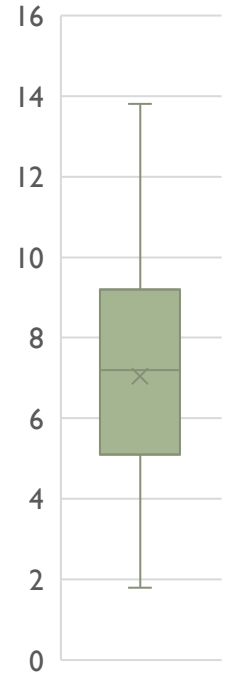
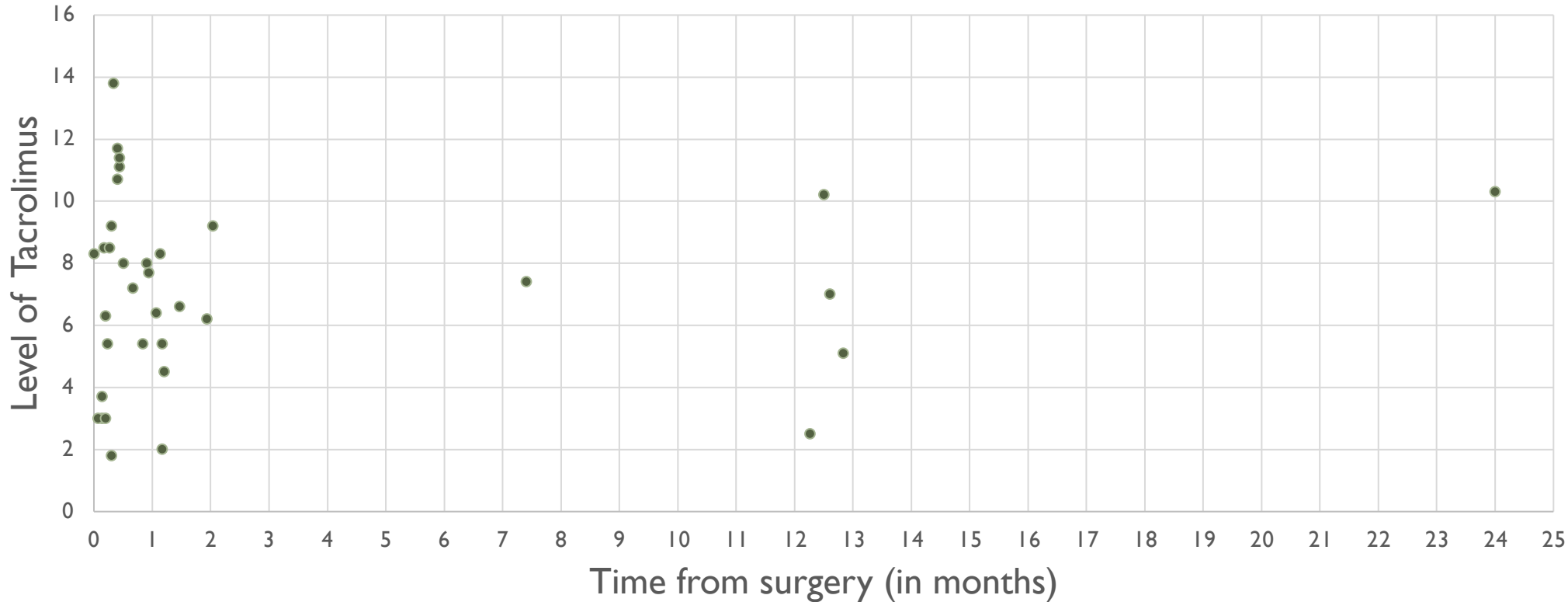
Presentation of Neurotoxicity



42 patient switched due to Neurotoxicity;
1 death and 6 patients lost to follow up
while on cyclosporine

Switch done only for moderate to severe neurotoxicity. Mild manifestations (headache, tremors) managed without switch.

Switch to Cyclosporine



Post-operative day of Switch to Cyclosporine
(n = 61 patients)

Median = 20 days postoperatively
Wide range - 0 to 385 days

Median level of
Tacrolimus = 7.2ng/mL

No cut-off or direct
correlation to level

Conclusion

Neurotoxicity of CNI is higher in Tacrolimus – thus, cyclosporine is the alternative used.

Most patients can be safely reverted to tacrolimus after the resolution of neurological symptoms.

- Duration from symptom resolution to switch was shortened to a few months in our patients, over time.
- No recurrence of neurotoxicity was noted.

REVERSION TO TACROLIMUS IS POSSIBLE IN MOST PATIENTS, WITHOUT ANY UNTOWARD INCIDENT (I.E. RECURRENCE OF NEUROLOGICAL COMPLICATION)

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Thank you!



Financial Disclosures: None