Topic : Liver

## CLINICAL OUTCOMES OF 90 CASES OF POST-TRANSPLANT LYMPHOPROLIFERATIVE DISORDER (PTLD) AFTER LIVER TRANSPLANTATION: A 24-YEARS SINGLE- CENTER EXPERIENCE

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**Background** : Post-Transplant Lymphoproliferative Disorder (PTLD) is a rare but severe complication following solid organ transplantation (SOT), with a mortality rate of approximately 50%. The timing of PTLD onset may influence clinical features and prognosis; however, data focusing on liver transplantation (LT) are limited. This study examines the clinical characteristics and outcomes of PTLD in LT recipients.

**Methods** : From January 2000 to December 2023, LT recipients diagnosed with PTLD at Asan Medical Center were retrospectively reviewed. PTLD diagnoses were pathologically confirmed, and cases were classified as early or late onset based on timing post-transplantation. Study endpoints included complete remission (CR) rates and overall survival

**Results** : Among 8,351 LT recipients, 90 developed PTLD, with 24(26.6%) classified as early onset and 66(73.4%) as late onset. Early onset PTLD was more frequent in pediatric recipients (45.8% vs. 15.2%, p=0.004). Median time to PTLD diagnosis was 3.25 years. Serum EBV DNA was detected more often in early onset cases (78.3% vs. 35.6%, p=0.001). CR rates were 66.7% in early onset and 80.3% in late onset PTLD (p=0.258), and mortality rates were similar (41.7% vs. 37.9%, p=0.809). In a subgroup analysis of 69 adult PTLD patients, demographic data were consistent with the overall cohort. High IPI scores (HR 5.496, 95% CI 1.529-19.762, p=0.009) and graft involvement (HR 2.736, 95% CI 1.096-6.828, p=0.031) were significant prognostic factors for survival.

**Conclusions** : Early and late onset PTLD in LT recipients differ clinically but show similar long-term outcomes. High IPI scores and graft involvement are poor prognostic indicators, emphasizing tailored strategies to improve outcomes.

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