

Acute Kidney Injury Post Liver Transplant With Grafts Treated By Hypothermic Machine Perfusion

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INTRODUCTION

Many advantages were reported using the MP to rescue marginal grafts in the immediate- and long-term outcomes. AKI is a common post-transplant complication using these livers that might compromise patient outcome and amplify the transplant cost.

AIMS

Aim of the study was to analyze the immediate post operative outcomes, including the AKI between patients with MP graft (MP) versus recipients of graft cold stored (noMP), before and after a propensity score matching (PSM).

METHODS



Jan 2022 – Sept 2024
Prospectively maintained database



PSM for DRI, MaS>30%; recipient MELD
MP vs noMP recipients with/no 1:3 PSM

RESULTS



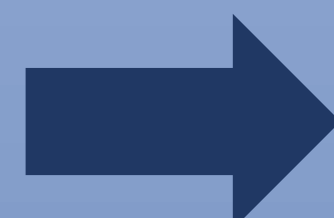
MP

23

vs

noMP

122



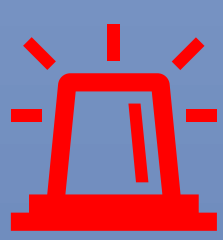
MP

23

vs

noMP

68



Higher DRI (2 vs. 1.9), donor age (75 vs. 66), moderate macro-steatosis (13% vs 2%) in MP group ($p < 0.05$)

PSM



Recipients: higher AKI (57% vs 39%; $p > 0.05$) in MP similar rate AKI-stage3 in MP

Significantly higher donor age in MP (75 vs 67, $p < 0.05$)

NO CVVH; equivalent immunosuppression protocol

In MP better post-op function & EAD
Higher AKI rates but not significant: 57% vs 44% (MP vs noMP, $p = 0.05$)



Recipient Pre-Transplant Creatinin = the only significant Risk factor for AKI (CI:1,84-43,48; OR:9, $p = 0,011$)

CONCLUSION

MP remains an important device to rescue marginal livers. In the era of marginal grafts where all efforts aim to increase the donor pool, more post-operative attention should be given to preserve the renal function, even if HMP is used.