COMPARISON OF CLINICAL PROGNOSTIC INDICATORS (CPI) WITH MODEL FOR END-STAGE LIVER DISEASE (MELD) AND KING'S COLLEGE HOSPITAL (KCH) CRITERIA FOR MORTALITY PREDICTION IN ACUTE LIVER FAILURE

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Background: In a retrospective study, we demonstrated that the presence of any 3 of 6 clinical prognostic indicators (CPIs) were better than that of King's College Hospital (KCH) criteria and model for end-stage liver disease (MELD) score for predicting adverse outcome in patients with acute liver failure (ALF) due to acute viral hepatitis (*Liver Transplant* 2007;13:814–21).

Aim: To validate CPI and to compare CPI with MELD and KCH criteria in a cohort of patients with ALF prospectively.

Method: A total of 86 patients (mean age 26.8 years, SD 10.9 years) with ALF due to acute viral hepatitis were included between January 2008 and June 2011. Area under curve (AUROC), sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and diagnostic accuracy were calculated for CPI, MELD, and KCH criteria.

Result: Acute hepatitis E was the most common cause of ALF and was present in 31 (36%) patients followed by acute hepatitis A and B in 17 (19.7%) patients each, non-A–E in 15 (17.4%) and dual viral infection in 6 (6.9%; E and B in 4, A with B and E in 1 each). A total of 28 (33.5%) patients survived. Performance of various prognostic models is shown in Table 1 below.

Conclusion: CPI has better prognostic value than KCH and MELD criteria.

TUBERCULOSIS AND LIVING DONOR LIVER TRANSPLANTATION—A 7-YEAR EXPERIENCE FROM INDIA

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Introduction: Dealing with tuberculosis (TB) infection in living donor liver transplantation (LDLT) setting, as regards the selection and the management of recipients and donors in the peritransplant period, is challenging due to the lack of management guidelines and hepatotoxicity of anti-TB drugs.

Method: Of 682 LDLTs performed from January 2004 to December 2010 at our institute, 60 individuals (8.8%), 49 recipients (R group) and 11 donors (D group), had associated TB infection. Among recipients ($n=49$), 3 patients had anti-tubercular therapy (ATT)-induced acute liver failure (ALF) (Group A), 17 recipients had a past history of treated TB (Group B), 18 recipients were either receiving TB treatment or diagnosis was made during LT evaluation (Group C), in 5 recipients abdominal/hepatic TB was diagnosed either intra-operatively or in the explanted liver after transplant (Group D), while 4 patients developed TB postoperatively (Group E). Two recipients (Group F) received prophylactic ATT due to extrapulmonary TB in the donor. Among donors, 6 had a past history of treated TB (Group 1), 4 were either receiving TB treatment or diagnosis was made during workup (Group 2), whereas in 1 donor abdominal lymph node TB was detected intra-operatively (Group 3). We studied the short- and long-term outcomes in these individuals using our management protocol in the peritransplant period.

Result: Fifty-seven (95%) LDLTs were elective, whereas 3 were done for ALF. Recipients were predominantly male ($n=38$, 78%), whereas a majority of donors were female ($n=7$, 64%). In R group, the median age was 48 years (range 14–74 years), whereas in the D group it was 36 years (range 21–47 years). In 51 cases, the diagnosis of TB was definitive, whereas 9 recipients received presumptive ATT. The site of TB was pulmonary in 33% of recipients and 64% of donors. We used a modified ATT regimen consisting of Isoniazid, Pyrazinamide, Ethambutol and Ofloxacin for most recipients in the peri-operative period, whereas few

Table 1 Comparison between different prognostic models.

Prognostic model	AUROC (95% CI)	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)	Diagnostic accuracy (%)
CPI	0.754 (0.641–0.867)	75.8	75	86.2	60	75.5
MELD	0.673 (0.546–0.800)	81	53.5	78.3	57.6	72
KCH	0.620 (0.501–0.739)	27.5	96.4	94.1	39.1	50

AUROC: Area under curve; CPI: clinical prognostic indicators; KCH: King's College Hospital; MELD: model for end-stage liver disease; NPV: negative predictive value; PPV: positive predictive value.