Evaluation of MELD score in liver transplant allocation.

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Background. The increase in the number of patients with liver cirrhosis has necessitated the revision of the widely used Model for End-stage Liver Disease (MELD), which predicts short-term mortality and determines priority on the waiting list for liver transplantation. Later, sodium levels were shown to be an independent predictor of mortality in cirrhosis and were then incorporated into the MELD score, further enhancing its ability to predict mortality Thus, revision of the MELD score is needed to increase equity, reduce deaths and optimise outcomes on the liver transplant waiting list.
Materials and methods. We evaluated 265 patients with chronic liver disease, age≥18 years, included on the liver transplant waiting list between February 2013 and January 2022. MELD, MESO Index, MELD-Na, UKELD, iMELD, refitMELD, refitMELD-Na, upMELD, MELD 3.0 scores were used. Prognostic abilities for predicting 90-day mortality were investigated by applying receiver-operator-characteristic-curb analysis.
Results: 39 patients (34%) died of whom (male 28, female 21, mean age 48 years) on the liver transplant waiting list within 90 days of listing. However MELD score 3.0, had the best acceptable prognostic performance with areas below Roc-curbe(AUROC = 0.836). All scores achieved an average quality score of 75.1%. In 51.66% of patients, however, there was an increase in the prognostic score than the MELD score.
Conclusions. Thus, the MELD 3.0 score effectively predicts short-term mortality among patients with liver cirrhosis and specifically addresses gender disparities on the liver transplant waiting list while maintaining post-transplant survival.
Keywords. waiting list, MELD 3.0, liver transplant