

RISK FACTORS OF MORTALITY IN PATIENTS WITH LIVER NECROSIS

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Introduction:

The aim of this study was to analyze the risk factors associated with mortality among liver necrosis (LN) patients in hospitals in the United States.

Results:

There were 10,476 adult and 3,207 elderly patients with liver necrosis (acute and subacute) were admitted to hospitals. 1354 (13%) adults (A) and 617 (19%) elderly (E) patients died during their hospital stay.

Females accounted for 53% of the sample in both age groups. In the E group, males were, on average, 1.73 years older than females (45.26 vs. 43.53 years), while in the A group, males were 1.23 years younger than females (74.91 vs. 76.14 years).

A group had approximately a 6-7% higher mortality rate than an E group. In operatively treated patients, invasive diagnostic procedures (IDP) showed a significant protective effect against mortality (OR = 0.690, 95% CI: 0.534-0.890).

Age was associated with higher mortality rates in adult patients (OR = 1.016, 95% CI: 1.004-1.027). In patients with no operation, medical/surgical complications increased mortality odds by over 2.6 times in adults (OR = 2.665, 95% CI: 1.470-4.831) and by 4.3 times in elderly patients (OR = 4.331, 95% CI: 1.932-9.705).

Increased HLOS raised mortality odds in adults (OR = 1.013, 95% CI: 1.004-1.022) and lowered them in elderly patients (OR = 0.966, 95% CI: 0.944-0.988).

The IDP were a significant protective factor in non-operated patients (OR = 0.714, 95% CI = 0.586 - 0.871) for adults; OR = 0.552, 95% CI = 0.385 - 0.790) for elderly). Being female decreased mortality odds by about 36% in non-operated adults (OR = 0.638, 95% CI = 0.556 - 0.731).

Methods:

Data from the National Inpatient Sample database 2005-2014 were analyzed. Demographics, clinical data, and outcomes were collected. The association between various risk factors and mortality was investigated using multivariable logistic regression models.

Conclusion:

Age, medical/surgical complications, and prolonged hospital stays as consistent risk factors for mortality in liver necrosis patients.

The IDP are protective factor, reducing mortality odds in adults undergoing operations, and female is associated with a decrease in mortality odds in non-operated adults.

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