Acute Liver Failure

System-specific management (CNS, coagulopathy, infection, hemodynamics/renal), etiology-specific therapy, and transplant prognostication.

2023 ACG Clinical Guideline
Acute Liver Failure
Shingina, Mukhtar, Wakim-Fleming et al. · Am J Gastroenterol 2023

STRENGTH Strong Conditional

1 CNS Management

STATEMENT	STRENGTH
R1 — Grade ≥2 HE: consider early CRRT for hyperammonemia even without conventional RRT indications	Conditional Very low

2 Coagulopathy

STATEMENT	STRENGTH
R2 — Against routine correction of coagulopathy absent active bleeding or impending high-risk procedure	Conditional Very low

3 Infection

STATEMENT	STRENGTH
R3 — Against routine prophylactic antimicrobials — no improvement in bloodstream infection rate or 21-day mortality	Conditional Low

4 Hemodynamics & Renal Failure

STATEMENT	STRENGTH
R4 — Norepinephrine as first-line vasopressor for hypotension refractory to fluids	Strong Moderate
R5 — Add vasopressin as secondary agent if hypotension unresponsive to norepinephrine	Conditional Low

5 Etiology-Specific Management

STATEMENT	STRENGTH
R6 — Suspected APAP toxicity: early N-acetylcysteine administration	Strong Low
R7 — Non-APAP ALF: initiate IV N-acetylcysteine	Strong Moderate
R8 — ALF from HBV reactivation: start antiviral therapy	Strong Low
R9 — Mushroom poisoning: IV silibinin ASAP (IV penicillin G if silibinin unavailable)	Conditional Very low

6 Liver Transplant Prognostication

STATEMENT	STRENGTH
R10 — Use KCC or MELD for prognostication; KCC-positive or MELD >25 = high risk of poor outcome	Conditional Low

7 King's College Criteria at the Bedside

ETIOLOGY	POOR-PROGNOSIS CRITERIA (TRANSPLANT-LISTING TRIGGER)
APAP-induced	Arterial pH <7.30 (post-resuscitation) **OR** all three of: INR >6.5, creatinine >3.4 mg/dL, grade III–IV HE
Non-APAP	INR >6.5 **OR** any three of: age <10 or >40 yr; etiology indeterminate/drug-induced/non-A non-B hepatitis; jaundice-to-encephalopathy interval >7 d; INR >3.5; bilirubin >17.5 mg/dL
Triage cues	Grade 2 HE → transfer to ICU/transplant center. Grade 3–4 HE → intubate for airway protection. Early hepatology/transplant center contact is essential regardless of criteria status

Shingina A, Mukhtar N, Wakim-Fleming J, et al. ACG Clinical Guideline: Acute Liver Failure. *Am J Gastroenterol.* 2023;118(7):1128–1153.