

Hepatic Encephalopathy in Chronic Liver Disease

Classification/diagnosis, general treatment principles, episodic OHE treatment, recurrence prevention, MHE/CHE, and nutrition.

STRENGTH

● Strong (1)

● Weak (2)

1 Classification & Diagnosis

STATEMENT	STRENGTH
R1 – Classify HE by underlying disease type, severity, time course, and precipitating factors	Strong Level III-A
R2 – Diagnostic workup required, considering other disorders that can mimic HE	Strong Level II-2 A
R3 – Treat HE as a continuum from unimpaired cognition through coma	Strong Level III-A
R4 – HE diagnosis is by exclusion of other causes of brain dysfunction	Strong Level II-2 A
R5 – Divide HE into severity stages reflecting self-sufficiency and care needs	Strong Level III-B
R6 – Diagnose overt HE (OHE) by clinical criteria; grade via West Haven Criteria and GCS	Strong Level II-2 B
R7 – Diagnose/grade MHE and CHE using neurophysiological/psychometric tests performed by experienced examiners	Strong Level II-2 B
R8 – Test for MHE/CHE in patients who would benefit most (impaired QoL, employment/public-safety implications)	Weak Level III-B
R9 – Blood ammonia alone adds no diagnostic/staging/prognostic value; a normal value should prompt diagnostic reevaluation	Strong Level II-3 A

2 General Treatment Principles

STATEMENT	STRENGTH
R10 – Actively treat every OHE episode (spontaneous or precipitated)	Strong Level II-2 A
R11 – Secondary prophylaxis is recommended after an overt HE episode	Strong Level I A
R12 – Primary prophylaxis not required except in cirrhosis with known high HE risk	Weak Level II-3 C
R13 – Recurrent intractable OHE with liver failure is an indication for LT	Strong Level I
R14–17 – Four-pronged OHE approach: initiate care for altered consciousness; seek/treat alternative causes of mental status change; identify/correct precipitating factors; start empirical HE treatment	Strong Level II-2 A

3 Treatment of Episodic OHE

STATEMENT	STRENGTH
R18 – Identify and treat precipitating factors for HE	Strong Level II-2 A
R19 – Lactulose is first choice for treatment of episodic OHE	Strong Level II-1 B
R20 – Rifaximin is effective add-on therapy to lactulose to prevent OHE recurrence	Strong Level I A
R21 – Oral BCAAs as alternative/additional agent for patients nonresponsive to conventional therapy	Weak Level I B
R22 – IV L-ornithine L-aspartate (LOLA) as alternative/additional agent for nonresponders	Weak Level I B
R23 – Neomycin is an alternative choice for OHE treatment	Weak Level II-1 B
R24 – Metronidazole is an alternative choice for OHE treatment	Weak Level II-3 B

4 Prevention of Recurrent OHE

STATEMENT	STRENGTH
R25 – Lactulose is recommended for prevention of recurrent HE episodes after the initial episode	Strong Level II-1 A
R26 – Rifaximin add-on to lactulose is recommended for prevention after a second episode	Strong Level I A
R27 – Routine prophylactic therapy (lactulose or rifaximin) is not recommended for prevention of post-TIPS HE	Strong Level III-B
R28 – Prophylactic therapy may be discontinued once precipitating factors are well controlled or liver/nutritional status improves	Weak Level III-C

5 Treatment of Minimal & Covert HE

STATEMENT	STRENGTH
R29 – Treatment of MHE/CHE is not routinely recommended, apart from case-by-case basis	Strong Level II-2 B

6 Nutrition

STATEMENT	STRENGTH
R30 – Daily energy intake 35–40 kcal/kg ideal body weight	Strong Level I A
R31 – Daily protein intake 1.2–1.5 g/kg/day	Strong Level I A
R32 – Offer small meals or liquid nutritional supplements evenly distributed through the day plus a late-night snack	Strong Level I A
R33 – Oral BCAA supplementation may help achieve/maintain recommended nitrogen intake in patients intolerant of dietary protein	Weak Level II-2 B