

## Hepatic Encephalopathy

Hepatic encephalopathy is a condition often associated with liver failure in which the liver fails to remove toxins from the blood. The toxins cross the blood-brain barrier causing mental confusion. Usually reversible, this is a frequent complication of cirrhosis of the liver but other precipitating factors are GI bleed, infection, high protein diet, azotemia, constipation, electrolyte imbalances, and overuse of sedatives, analgesics and diuretics.

In the beginning stages of hepatic encephalopathy, of grade I, patients can seem euphoric, depressed, mildly confused, have a monotone voice and exhibit a sleep-cycle disorder.

More advanced, grade II, patients will be lethargic and confused.

In grade III, patients will be severely confused with incoherent language and be in a semi-stupor awakening with verbal stimuli.

Having reached grade IV without treatment, the patient is comatose and responding to painful stimuli.

Treatment consists of a diet with 80grams of protein a day. Too little protein can decrease muscle mass. Avoid eating red meat. Also avoid too much protein in one meal.

Good sources of protein:

- Soy beans
- Tofu
- Beans
- Legumes
- Fish

Lactulose will be most likely being given. This drug decreases the amount of ammonia and other toxins in the blood. The goal is for 2-3 soft bowel movements a day.

An antibiotic may also be given to also decrease the amount of ammonia produced by the intestines.

The underlying cause of the hepatic encephalopathy must also be treated.