Neurological complications of liver cirrhosis

- **Hepatic encephalopathy**
  - Acute phase
    - Hyperammonemia
      - Acute cerebral edema
  - Chronic phase
    - Cortical thinning
    - Cortical laminar necrosis
- **Hepatic myelopathy**
  - Spastic paraparesis
  - No sensory or sphincter impairment
- **Acquired hepatocerebral degeneration (non Wilsonian degeneration)**
  - Movement disorders (ataxia, parkinsonism)
  - Cognitive impairment
  - Neuropsychiatric syndrome
- **Cirrhosis-related Parkinsonism**
- **Cirrhosis-related intracerebral hemorrhage**
  - Coagulopathy
- **Diffuse cerebral edema**
  - Cytotoxic
    - Glutamine accumulation
  - Vasogenic
    - Increased cerebral blood flow
- **Neuroimaging alterations with/without clinical symptoms**
  - Hyperintensities in basal ganglia (globus pallidus)
  - Deposition of manganese
    - Hepatocellular failure
    - Portosystemic shunting

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