



Hyponatremia

in Cirrhosis

Hyponatremia?

- Na < 130 mmol/L (~20% of patients)

[Click here for general workup of hyponatremia video](#)

Severe hyponatremia (1% of patients)

- Na < 120 mmol/L OR
- Acute drop of > 10 mmol/L over 24 hours

Chronic stable asymptomatic hyponatremia with

- Na 120-125 mmol/L

Assess and treat contributing causes

Including: diuretics, dehydration from lactulose, other hyponatremia inducing medications

Symptomatic?

- Confusion, seizures, ataxia, headache

Asymptomatic?

Clue to Hypovolemic hyponatremia

- diarrhea, diuretics, large volume paracentesis and/or an abrupt decrease in urine output

Clues to Hypervolemic hyponatremia

Consider if:

- NO clinical clues for hypervolemia AND no response to a volume challenge

This is a medical emergency

Management

- Close monitoring
- Hypertonic saline
- Do not correct Na faster than 6 mmol/24 hours to reduce the risk of osmotic demyelination syndrome

Hyponatremia persists in spite of management

Why fluid restriction to < 1L/day has variable efficacy?

For fluid restriction to be effective, the patient needs to be able to drink less than they are urinating. Compliance is very challenging and therefore, often ineffective.

AASLD guidelines (2021) suggest fluid restriction to 1L for a Na of 120-125 mmol/L and more severe fluid restriction + albumin infusion for Na < 120 mmol/L

Consult nephrology for other therapeutic options

Treatment tips

- Stop diuretics or other contributing medications. May need to reduce lactulose.
- Correct hypokalemia
- Administer normal saline 500 mls → reassess serum sodium. If no improvement, consider repeating normal saline bolus
- IV albumin can also be tried, with limited data (PMID [2311979](#), [29889072](#))