

2-9a Severe hyponatraemia v.1

Hyponatraemia is defined as a serum sodium less than 130 mmol/L; **treat as severe if less than 125 mmol/L or symptoms**. The management plan alters depending on the exact sodium level, oxytocin administration and if the woman has delivered. Ensure blood samples are taken from a limb free from IV infusions. Point of care testing e.g., blood gases can provide rapid sodium results. Risk factors for hyponatraemia include excessive water ingestion, oxytocin infusion, insulin/dextrose infusion, pre-eclampsia

START

- 1 **Call for help** (obstetrician, anaesthetist)
- 2 **Check for clinical signs of severe hyponatraemia (Box A)**
 - If no clinical signs → go to 3
 - If clinical signs present →
 - ▶ Call ICU for help
 - ▶ Give 150 ml 2.7% hypertonic saline IV over 20 min
 - ▶ Check sodium after 30 minutes
- 3 **If sodium < 125 mmol/L -and- in labour -or- on IV oxytocin →**
 - ▶ If acute drop >10 mmol/L in < 24 hours → contact ICU -and- agree need for hypertonic saline infusion
 - ▶ Start fluid restriction to 30 ml/hr
 - ▶ Stop all drugs causing hyponatraemia
 - ▶ Check and record fluid balance hourly
 - ▶ Check sodium 2 hourly
 - ▶ Take paired blood and urine osmolalities
- 4 **At birth, alert neonatal team to maternal hyponatraemia**
- 5 **Once delivered -or- IV oxytocin discontinued →**
 - ▶ Check for signs of severe hyponatraemia (**Box A**)
 - ▶ If signs of severe hyponatraemia present → give 150 ml 2.7% hypertonic saline IV over 20 minutes
 - ▶ Start fluid restriction to 30 ml/hr
 - ▶ Check and record fluid balance
 - ▶ Check sodium 4 hourly

Box A: Signs of severe hyponatraemia

- ▶ Disorientation
- ▶ Agitation
- ▶ Seizures
- ▶ Depressed reflexes
- ▶ Focal neurological deficits
- ▶ Cheyne-Stokes respiration
- ▶ Coma

Box B: Critical changes

Sodium 125 – 129 mmol/L with no signs of severe hyponatraemia →
Hyponatraemia (not severe) 2-9b