

SCGH ED Adult Hyponatraemia Management Guidelines

Hyponatraemia Causes

Be aware of spurious causes of hyponatraemia: hyperproteinaemia, hypercholesterolemia, lab error, collection error (IV fluid administration).

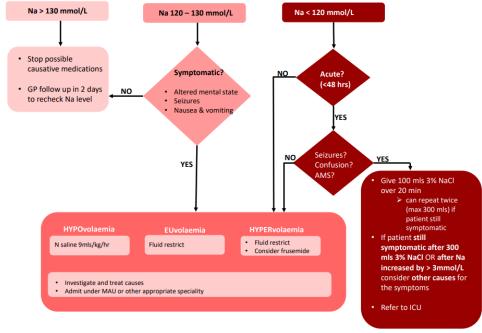
Investigations should be tailored, but ALL patients require a plasma osmolality, urine Na and urine osmolality.

Na <135 mmol/L **HYPERtonic HYPOtonic ISOtonic** Serum osmolality 275-295 mOsm/l Serum osmolality >295 mOsm/L Serum osmolality <275 mOsm/L Hypertonic fluid Hyperglycaemia administration Assess volume status **HYPERvolemia** EUvolemia Urine Na Urine Na Urine Na Urine Na >20 mmol/L ≤20 mmol/L >20 mmol/L CCF Urine Urine Urine Cirrhosis osmolality osmolality osmolality CRF Nephrotic HIGH NORMAL LOW Syndrome Prolonged Potomania SIADH exercise or high fluid Primary Meds intake polydipsia

Hyponatraemia Management

Avoid overcorrection. Aim to increase by 2-3 mmol/L in the $1^{\rm st}$ hour, 6-8 mmol/L in 24 hours.

Correct coexistent hypokalaemia.



Na content in IV fluids	
0.045% NaCl	77 mmol Na/L
0.9% NaCl	154 mmol Na/L
CSL	131 mmol Na/L
1.8% NaCl	308 mmol Na/L
3% NaCl	513 mmol Na/L
8.4% NaHCO₃	1000 mmol Na/L
20% NaCl	3400 mmol Na/L
23.4% NaCl	4000 mmol Na/L

Making 3% saline (if ready-made bags not available): add 26mL of 23.4% NaCl to 250mL normal saline (total volume 276mL, total Na is 142.5 mmol).

Dextrose solutions *DO NOT* contain Na and should be avoided in patients with hyponatraemia.

Regardless of cause, Na replacement should target 6 - 8 mmol/L /24 hrs and should not exceed 10 mmol/L/24 hrs until Na level is ≥130 mmol/L.

* if overcorrection occurs, seek advice from Endocrinology and/or ICU about reversal.