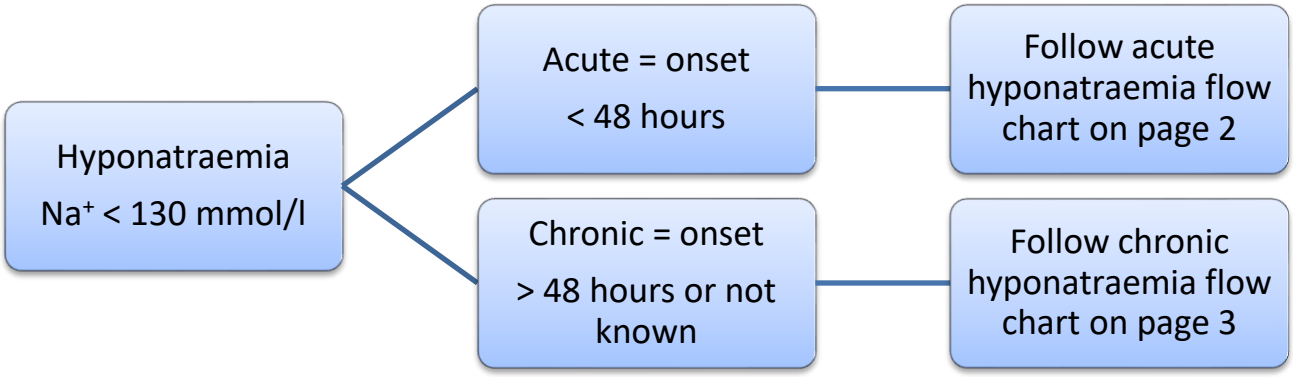
HYPONATRAEMIA GUIDELINES

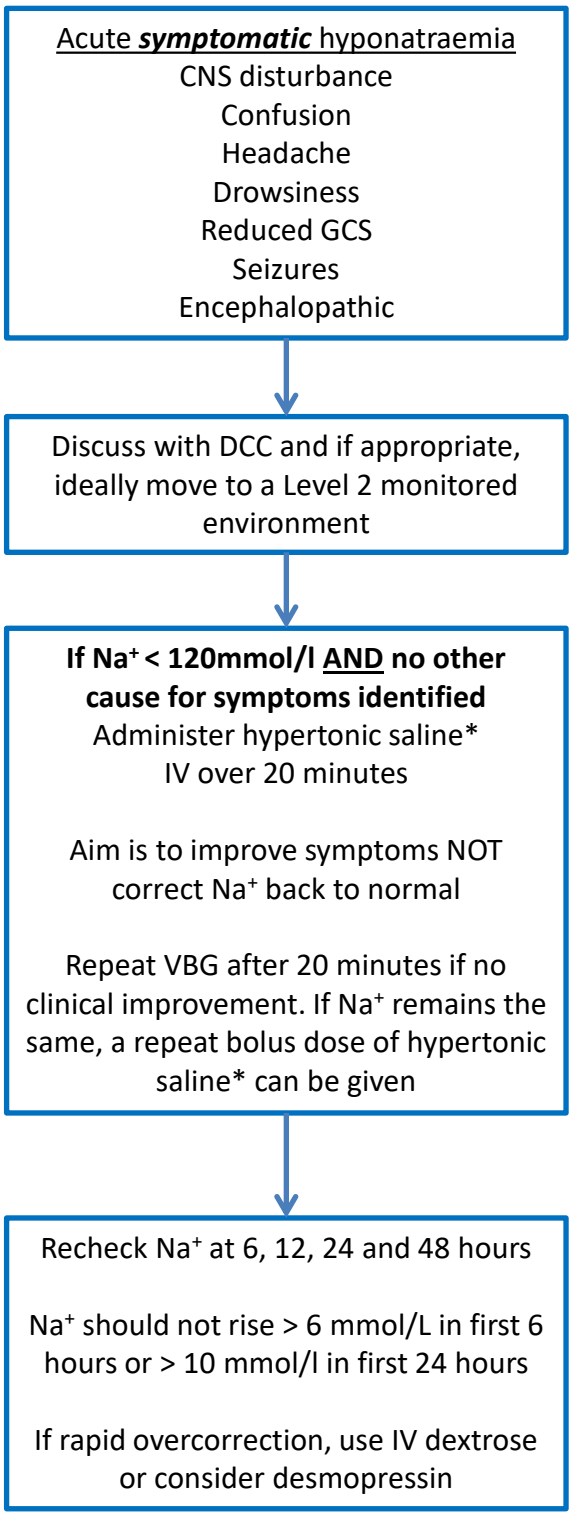


For all patients:

- ❑ Clinical assessment
- ❑ Blood tests to include:
  - ❑ Renal function
  - ❑ Serum osmolality
  - ❑ Glucose
  - ❑ Cortisol (9am level)
  - ❑ Thyroid function tests
  - ❑ Liver function tests
- ❑ Urine osmolality and urine Na^+ *(must be sent in a white top specimen bottle)*
- ❑ Review drug charts and stop any contributing medications, if appropriate *(see table below)*
- ❑ Review fluid charts – stop any use of dextrose infusions

Potential causes of drug induced hyponatraemia (not an exhaustive list)	
Anticancer agents	Vinca alkaloids (e.g. Vincristine), platinum compounds (e.g. Cisplatin), Alkylating agents (e.g. Cyclophosphamide)
Anti-depressants	Tricyclic antidepressants, SSRIs, MAOI
Anti-epileptic medications	Carbamazepine, Sodium Valproate
Anti-hypertensives	ACEi, ARB, Amlodipine
Anti-pyschotic medications	Phenothiazines, Butyrophenones
Diuretics	Thiazides, Indapamide, Amiloride, loop diuretics
Proton pump inhibitors	Omeprazole

ACUTE HYPONATRAEMIA GUIDELINES

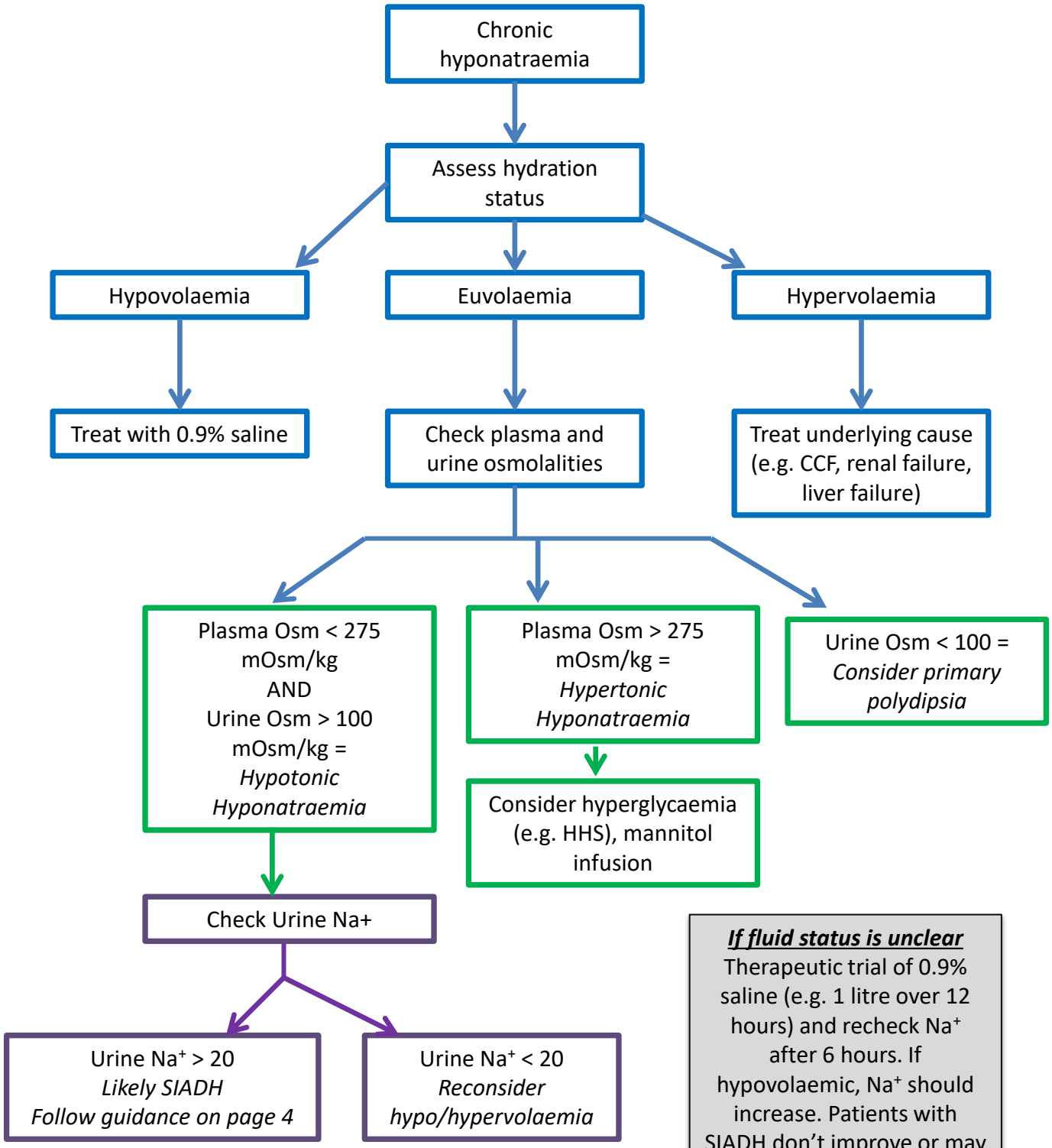


*For hypertonic saline use:
167ml of 2.7%
OR
250ml of 1.8%

Should only be used following discussion with a consultant (registrar overnight).

Order hypertonic saline from pharmacy, or out of hours, obtain stock from the pharmacy emergency cupboard in CGH or GRH.

CHRONIC HYPONATRAEMIA GUIDELINES



If fluid status is unclear

Therapeutic trial of 0.9% saline (e.g. 1 litre over 12 hours) and recheck Na^+ after 6 hours. If hypovolaemic, Na^+ should increase. Patients with SIADH don't improve or may worsen – discontinue fluids if so

SIADH GUIDELINES

Confirm that

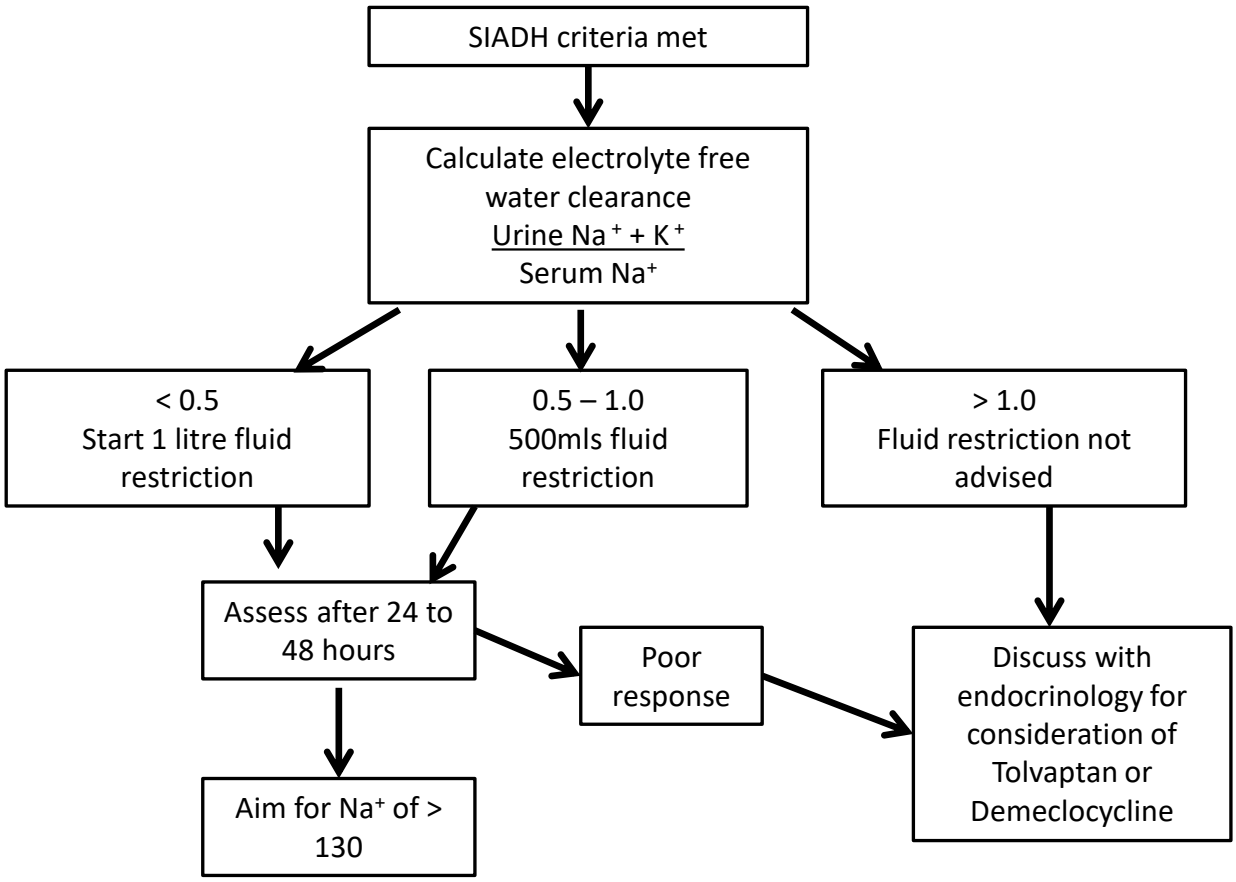
- ❑ Clinically euvolaemic
- ❑ Excluded renal failure
- ❑ Excluded adrenal insufficiency
- ❑ Excluded severe hypothyroidism

- ❑ Urine $Na^+ > 20$
- ❑ Urine Osmolality > 100
- ❑ Serum Osmolality < 275

- ❑ Consider underlying cause e.g. Malignancy, infection, drug induced

- ❑ Stop any drugs that can cause hyponatraemia, if appropriate.

  If thought to be drug induced this may be all that is required. Monitor Na+ levels after stopping medications but there is no need to do fluid restriction unless Na+ not improving



NOTES

Rates of correction

Safe limit – 10 mmol/L in first 24 hours, 8 mmol/L in subsequent 24 hours

Groups at more risk of osmotic demyelination are elderly patients, children < 16, malnourished, alcoholics, CNS disease and post operative patients. May need to consider lowering limits for correction in these groups of patients.

Tolvaptan advice

If using Tolvaptan (ADH antagonist) the following is advised:

- Discuss with endocrinology team before administration. Prescription must be authorised by a consultant
- Remove any fluid restriction
- Allow patient to drink to thirst response
- Initiate at a dose of 15mg
- Prescribe on the STAT section of the drug chart
- Repeat Na^+ 6 hours later
- Repeat dose if no improvement after 24 hours (and if no improvement after second dose – reconsider diagnosis)
- May only need one or two doses to correct sodium levels back to normal so do not prescribe on the regular side of the chart

References

The diagnosis and management of inpatient hyponatraemia and SIADH. Grant et al. Eur J Clin Invest 2015; 45 (8):888–894

Hyponatraemia Guideline
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