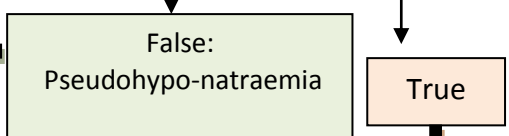


## Hyponatraemia (Na <133 mmol/L)

- Na <115 mmol/L
- Neurological symptoms
- Severe hypovolaemia
- Patient unwell

Immediate admission to hospital recommended

Occurs in hypoproteinaemia (eg myeloma) and hypertriglyceridemia. All sodium's <120 & all samples with total protein >90 will be checked for pseudohyponatraemia by the lab



Repeat measurement to confirm result and establish if changing.  
 Na 115-125; repeat in 1-2 days. Na 126-132; repeat within 1 week

- Request serum osmolality if not already done
- Consider admission to hospital if rapidly failing (>10 mmol/L over days)

- BOX 2 some drug causes (list not exhaustive)**
- ACE inhibitors
  - Amiodarone
  - Antipsychotics
  - Carbamazepine
  - Desmopressin
  - Diuretics
  - SSRIs
  - NSAIDs
  - Opiates
  - PPIs
  - SSRIs
  - Tricyclics
  - Theophylline

- BOX 1. Some causes of hypo-osmolar hyponatraemia**
- Drugs (see box2)
  - Adrenal insufficiency
  - CCF
  - Cirrhosis
  - GI loss
  - Hypothyroidism (rare)
  - Nephrotic syndrome
  - Renal failure (chronic)
  - Skin loss (eg burns)
  - SIADH (see box 3)

**Osmolality high >295**

Check plasma glucose\* if not already done

\*Hyperglycaemia causes hyponatraemia with normal or high serum osmolality

**Osmolality normal 275 - 295**

Check serum protein & triglycerides and plasma glucose\* if not already done

**Osmolality low <275 See Box 1**

- Review patient's symptoms and look for cause (see Box 1 & 2)
- Stop any drugs which may be contributing (if safe to do so)
- Check renal, adrenal \* & thyroid function (see Box1)
- Consider seeking specialist advise if sodium <120

**? SIADH**  
 If no apparent cause (see Box 1 and 2) send paired serum and spot urine for osmolality and sodium

**Urine osmolality >100 mOsmol/Kg and urine sodium >20 mmol/L**

Yes

Possible SIADH see box 3 for possible causes

No

Phone biochemist to discuss

- Box 3 . Some causes of SIADH**
- Malignancy** – mainly small cell lung cancer, also some GI and genitourinary
  - Respiratory** – pneumonia, PE, abscess. TB & CF
  - Cerebral** – CVA, trauma, Tumour & infection
  - Drugs** –see Box 2
  - Misc** – postop pain, nausea, acute intermittent porphyria

Advice for Barnsley patients is available via contacting Biochemistry on 01226 432733 and speaking to Dr.Straffen.