

## Hyponatraemia in Primary Care

Hyponatraemia may be due to either loss of sodium or overload of water or a combination of both. In the primary care setting most cases are mild and asymptomatic. Hyponatraemia associated with weakness, lethargy, confusion and headache should be investigated promptly.

### Urgent Action Required:

- Consider hospital admission if serum Na is less than 120mmol/L or falling rapidly
- If serum Na is less than 130mmol/L in patients <16years of age, discussion with paediatrics and/ or admission should be considered
- If hypoadrenalism is present or suspected, urgent investigation and/ or steroid administration may be required. Clinical signs include postural hypotension and pigmentation. Biochemical signs include high or high/normal serum potassium and low glucose. A [short synacthen test](#) is required for confirmation of the diagnosis, although a random serum cortisol may be of some use

### Further Investigation:

- Artefactual causes should be considered. High glucose, triglyceride and protein concentrations may cause pseudohyponatraemia. Serum [osmolality](#) will be normal
- Review medication. Drugs which cause low Na include diuretics, tricyclic antidepressants, carbamazepine and fluoxetine.
- Repeat U&E to establish if the sodium concentration is stable or changing. Measure glucose and osmolality on the same sample, and send a random urine (white top tube) at the same time for urine sodium and osmolality (unhelpful if the patient is on a diuretic)

### Interpretation and Further Action:

- A stable concentration of >125 mmol/L in a well patient may be of little clinical significance. Changes up to 5 mmol/L may be non-significant due to normal variation
- In oedematous states (e.g. cardiac failure, hepatic cirrhosis and hypoalbuminaemia) hyponatraemia reflects the severity of the underlying disease and will not normally require specific action to be taken
- Hyponatraemia with a low urine Na (<20mmol/L) in a dehydrated patient suggests extra-renal Na loss e.g. vomiting, diarrhoea. Rehydration is appropriate – orally if possible.
- Hyponatraemia with a high urine sodium concentration in a dehydrated patient suggests renal Na loss e.g. diuretic therapy, salt-wasting nephropathy or adrenal insufficiency
- SIADH is a diagnosis of exclusion in a normally hydrated patient. Urine will be inappropriately concentrated in the face of hyponatraemia