

KISS: Hyponatraemia

Based on [BMJ Best Practice 2018](#) & [NICE-CKS 2015](#)

- **Classification:** Acute (<48 hours) or chronic (>48 hours)
 - Mild, Na 130 - 135 mmol/l
 - Moderate, Na 125 - 129 mmol/l
 - Severe, Na < 125 mmol/l
- **Symptoms**
 - Depend on severity and speed of onset; mild and chronic usually asymptomatic
 - Severe and acute are symptomatic, cerebral oedema may occur once Na < 125
 - Symptoms include headaches, malaise, fatigue, nausea and vomiting, cramps, unsteadiness and falls, cognitive problems, confusion, delirium & seizures
- **Causes**
 - Manifold potential causes, but essentially due to *relative excess of water to sodium* causing decreased plasma osmolality
 - **Three main categories** depending on fluid status
 - **Hypovolaemic**, due to excessive sodium loss from GI tract (e.g. d & v), skin (e.g. sweating) or renal (e.g. drugs or Addison's disease)
 - **Hypervolaemic**, due to excessive fluid retention e.g. heart failure, kidney failure, nephrotic syndrome, liver failure
 - **Euvolaemic**, due to inappropriate ADH secretion; may be caused by malignancy, respiratory, neurological or endocrine disease; low solute intake ('tea & toast diets') maybe a cause
 - **Drug** causes include diuretics, SSRIs, carbamazepine and less commonly PPIs, antipsychotics, TCAs, opiates, NSAIDs and ACEi/ARBs
- **Management**
 - Careful clinical assessment including for possible underlying causes and volaemic status
 - **Admit** if acute, severe, symptomatic, significant hypovolaemia or suspect Addison's
 - **Specialist advice** if moderate and asymptomatic
 - **Primary care management** if asymptomatic and mild, repeat and review
 - Check wider range of bloods including TSH, lipids, glucose, proteins
 - Check plasma and urine osmolality and urine Na
 - *serum osmolality low (<275 mOsm/kg), urine osmolality high (> 100 mOsm/kg) and urine Na high (>30mmol/L) suggests SIADH if they are euvolaemic & excessive Na loss if they are hypovolaemic*
 - Stop causative medication if possible & repeat after 2 weeks
 - If intercurrent illness treat & repeat after 2 weeks
 - If SIADH, arrange tests or refer as appropriate to find underlying cause e.g. consider CT chest, abdo, pelvis for underlying malignancy