STANDARD TREATMENT WORKFLOW (STW)

Approach to Hyponatremia

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**Standard Treatment Workflow (STW)**

**APPROACH TO HYPONATREMIA**

ICD-10-E87.1

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**Assessment of Volume Status**

- **Hypovolemia**
  - Total body water ↓
  - Total body sodium ↓

- **Euvolemia (No edema)**
  - Total body water ↔
  - Total body sodium ↔

- **Hypervolemia**
  - Total body water ↑
  - Total body sodium ↑

**TREATMENT**

- **Intravenous hydration with isotonic normal saline in hypovolemic hyponatremia**
- **Treatment of underlying disease in hypervolemic hyponatremia**

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**Is Hyponatremia severe? (<125 mmol/l)**

- **Yes**
  - Vomiting, seizures, obtundation, coma, respiratory distress, unstable gait/ falls

- **No**
  - Significant sequelae unlikely

**Severe hyponatremia treatment (Acute < 48 hours)**

- Correction with 3% saline 0.5-1ml/kg/hour till resolution of symptoms or until safe Na target to a total 4-6mmol/l, this modest increase is sufficient to alleviate severe symptoms. After that corrective guidelines chronic hyponatremia are appropriate

**Chronic/Unknown (> 48 hours)**

- Correction: 3% saline 0.5-1ml/kg/hour till resolution of symptoms or until safe Na target
- Correction* not > 8-10 mmol within first 24 hours
- Oral furosemide 15 mg on day one and then 30-60 mg per day if serum Na remains below 135 or rise is less than 5 mmol per 24 hours, 6-8 hourly monitoring of serum Na to be done

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**Na deficit = 0.6 x body weight (target Plasma Na-starting Na concentration)**

- 1 litre of 3% hypertonic saline=513mmol Na (1ml/kg/hr increases serum Na by 1mmol/l/hr)
- 1 litre of isotonic saline=154 mmol Na

**AABBREVIATIONS**

- ECF: Extracellular fluid
- Na: Sodium
- SIADH: Syndrome of inappropriate antidiuretic hormone secretion

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This STW has been prepared by national experts of India with flexibility considerations for various levels of healthcare systems in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on other specific conditions, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information. For more information, visit the website of DHR for more information.