## SIADH vs Cerebral Salt Wasting after Traumatic Brain Injury

|   | SIADH  | Cerebral salt wasting   |
|---|--|---|
| Signs & symptoms  | Hyponatremia + euvolemia or<br>hypervolemia  | Hyponatremia + hypovolemia  |
|   | Look at volume sta   | atus to differentiate   |
| Work-up   | Determine volume status<br>Urine sodium<br>Urine/serum osmolality<br>Serum sodium q6 hours   |   |
| Diagnostic criteria   | <ul> <li>Hyponatremia</li> <li>Increased Urine osmo<br/>&gt;100</li> <li>Decreased UOP</li> <li>Decreased serum osmo<br/>Increased Urine Na&gt;40</li> </ul> | <ul> <li>Hyponatremia</li> <li>Increased Urine osmo<br/>&gt;100</li> <li>High or normal UOP</li> <li>Decreased serum osmo</li> <li>Increased Urine Na &gt;40</li> </ul> |
| Management  | <ol> <li>*General Measures</li> <li>Urea 15g BID</li> <li>HTS (100mL), if<br/>symptoms present.<br/>May repeat as<br/>needed.</li> </ol>                     | <ol> <li>*General Measures</li> <li>Fludrocortisone 0.1 mg<br/>BID</li> <li>HTS (100mL), if<br/>symptoms present. May<br/>repeat as needed.</li> </ol>                  |
| Avoid rapid correction of hyponatremia of more than 8 meq/L in 24 hours |  |   |

\*General measures include the following:

~ Identify and treat the underlying cause of hyponatremia if possible.

~ Identify drugs taken by the patient that could contribute to hyponatremia (i.e. amiodarone, antidepressants, anticonvulsants, antipsychotic agents, thiazide diuetics). Discontinue those drugs unless there is no reasonable substitute and stopping the medication would cause harm.

~ Reduce intake of electrolyte-free water (**impose free water fluid restriction, eliminate IV hypotonic fluids, increase dietary salt**). Avoid free water restriction in SAH due to risk for vasospasm.

\*\*Hypertonic saline requires transfer to STICU and should be considered for patient's with acute hyponatremia (<48 hours), serum sodium of < 130mEq, and/or in patients with symptoms of hyponatremia including change in level of consciousness, seizures, respiratory distress, or coma.