Diabetes Insipidus (DI) Following Traumatic Brain Injury

Onset of dilute polyuria in the setting of TBI: UOP > 300 ml/hour

Other reasons for diuresis: Diuretics, large resuscitation, mannitol, hyperglycemia, cerebral salt wasting?

Urine Specific Gravity < 1.005
Hypernatremia greater than clinically desired than goal set by Trauma or Neurosurgery

1. Start DDAVP 0.5-2 mcg IV q12 hours (May increase frequency to q8 hours)
2. Replace volume losses with balanced solution crystalloid if hypovolemic. (Ex. Plasmalyte, LR)
3. If slow response to DDAVP, may consider correcting free water deficit with D5W/enteral fluids

During therapy: Check electrolytes at least q4 hours in the acute phase, follow urine specific gravity, strict I&Os, and be aware that sodium should NOT rise or fall > 1mEq/h
References


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Brad Dennis, MD
Laurie B Ford, ACNP-BC
Joshua P Smith, DO
Leanne Atchison, PharmD
Jennifer Beavers, PharmD