PALLIATIVE CARE TIPS
Issue # 11 Hydration

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Rationale: In 2008, a Cochrane review concluded that the paucity of methodologically rigorous studies precluded any clinical recommendations with respect to the use of medically assisted hydration (tube inserted intravenously, subcutaneously or enterally) in palliative care patients (Good et al, 2008). Potential benefits of hydration include alleviation of hyperactive delirium and opioid-induced neurotoxicity, whereas potential burden include increasing pulmonary and gastrointestinal secretions, edema and ascites. Decision making with respect to hydration, therefore, should be individualized with a multidisciplinary approach including a thorough clinical assessment and detailed discussion of the patient and family's preferences and goals in the balance of potential benefits versus burden (Dalal et al, 2008).

Method: Hydration by the subcutaneous route (hypodermoclysis) is preferred over the intravenous route in the palliative care setting because of less pain from needlesticks, less expensive, greater ease of site access, possibility of connecting/disconnecting to facilitate patient mobility, and feasibility for home administration.

Fluid: An electrolyte-containing fluid should be used, as non-electrolyte solutions can draw fluid into the interstitial space:
Rehydration → Normal Saline (NS: 0.9% NaCl)
Maintenance → 2/3 Dextrose & 1/3 Saline (3.3% D/ 0.3% S)
KCl and $MgSO_4$ may be added (watch for site irritation)

Rate: Continuous → up to 100 cc/hr, by gravity
Bolus → 500 cc over 1 hr up to 3 times/day, by infusion pump

Volume: Palliative care patients generally require less fluid than the average population:
Rehydration → 2 – 2.5 L/day
Maintenance → 1 – 1.5 L/day (0.5 L/day if anuric)

Monitoring: Reassess clinically.
Blood work may be helpful (electrolytes, urea, creatinine).
Note that edema and third-space accumulations may be manifestations of disease processes (hypoalbuminemia, etc.) and may not correlate with intravascular volume status.

REMEMBER: For referrals, questions, or telephone consultations call 496-1300 weekdays and weekends.

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