Fluid bolus therapy (FBT) is a widely used intervention in paediatric critical illness. The aim of this study was to describe the attitudes and practices towards FBT of paediatric intensive care doctors in Australia and New Zealand” Gelbart et al (2018).

Abstract:

OBJECTIVE: Fluid bolus therapy (FBT) is a widely used intervention in paediatric critical illness. The aim of this study was to describe the attitudes and practices towards FBT of paediatric intensive care doctors in Australia and New Zealand.


SETTING: Paediatric intensive care units with greater than 400 admissions annually.

PARTICIPANTS: Paediatric intensive care specialists and junior medical staff.

MAIN OUTCOME MEASURES: Preferences for FBT and markers of fluid responsiveness.

RESULTS: There were 106/175 respondents (61%); 0.9% saline and 4% albumin are used frequently or almost always by 86% and 57% of respondents respectively. The preferred volume and duration were 10 mL/kg in less than 10 minutes. The highest rated markers of fluid responsiveness were heart rate and blood pressure – rated as “good” or “very good” by 75% and 58% of respondents respectively. Central venous saturations and serum lactate were the highest rated biochemical markers. The most frequently expected magnitude of change for heart rate and blood pressure was 6-15% by 89% and 76% of respondents respectively. The preferred fluid composition for sepsis, trauma, traumatic brain injury and acute lung injury was 0.9% saline, and 4% albumin for post-operative cardiac surgery.

CONCLUSIONS: Paediatric intensive care doctors prefer 0.9% saline and 4% albumin for FBT. Heart rate and blood pressure are the most preferred markers to assess fluid responsiveness. Preferences for FBT in specific conditions exist.
Reference: