Alberta Health Services

Safer Practice Notice

Status

Active ■
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Zone Application

Provincial ■
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7 Sep 2018

Contact:

Emergency SCN

Use of Hydroxyethyl Starch (HES) Solutions (Voluven, Volulyte, or Pentaspan) in Critical Care

Health Canada and the manufacturers of blood volume expanders containing hydroxyethyl starch (HES) solutions recommend that these products no longer be used in critically ill patients with certain health conditions. Some recent studies have compared HES with other blood volume expanders in critically ill patients with sepsis. These studies suggest that patients treated with HES are at a higher risk of kidney failure or death.

FDA has analyzed recent data that indicate an increased risk of (i) mortality and renal injury requiring renal replacement therapy in critically ill adult patients, including patients with sepsis and those admitted to the ICU; and (ii) excess bleeding particularly in patients undergoing open heart surgery in association with cardiopulmonary bypass. AHS Health Technology Assessment has conducted a similar review and reported similar findings

Action

Recommendations include the following:

- Do not use HES solutions in critically ill adult patients with sepsis, and those admitted to the ICU.
- Avoid use in patients with pre-existing renal dysfunction.
- Discontinue use of HES at the first sign of renal injury.
- Monitor renal function for at least 90 days in all patients exposed to HES solutions. The need for renal replacement therapy has been reported up to 90 days after HES administration.
- Avoid use in patients undergoing open heart surgery in association with cardiopulmonary bypass due to excess bleeding.
- Discontinue use of HES at the first sign of coagulopathy

Alternate products that can be used include crystalloid product or Albumin at the discretion of the physician ordering the therapy.

Reference: http://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2013/34299a-eng.php