

Watch Out *for...*

Dangerous Boluses of Dextrose-Saline

Watch Out Notice: 02

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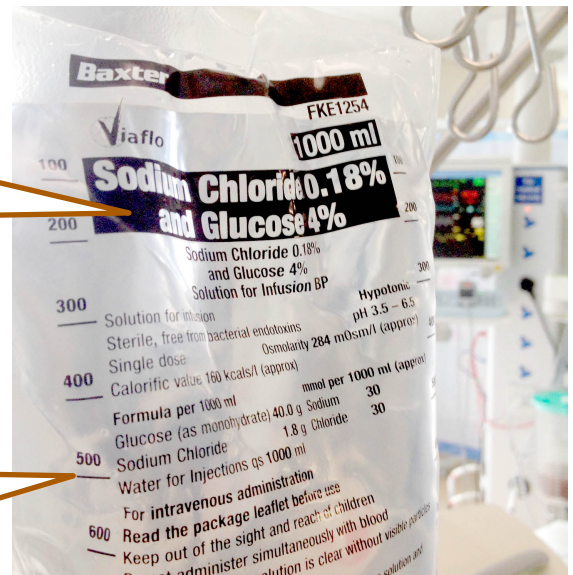
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What Happened?

A patient in Critical Care was prescribed two 250ml boluses of 0.18% Sodium Chloride / 4% Dextrose as a fluid challenge.

The first bolus was given, but a nurse spotted the error before giving the second bolus.

Fortunately, the patient was not harmed.



The Facts:

- Although “Dextrose-Saline” begins as an isotonic solution, the dextrose is rapidly metabolised after entering the bloodstream.
- This means a hypotonic solution is effectively given.
- Bolusing hypotonic fluids can cause death due to cerebral oedema

Protect Your Patients:

- **Never use dextrose-containing solutions for IV fluid boluses***
(eg. 5% Dextrose, 10% Dextrose, 0.45% Saline/5% Dextrose and 0.18% Saline/4% Dextrose)
- **Only use iso-osmolar fluids for IV fluid boluses**
(eg. Hartmann’s Solution, 0.9% “Normal” Saline, Gelofusine or Blood)
- **Follow your Trust/ Departmental guidelines for fluid therapy**

*Rare exceptions include:

- 20% Dextrose for emergency correction of low blood sugar
 - Treatment of severe diabetes insipidus in Critical Care
- Seek expert senior help under these circumstances