Watch Out for...

Dextrose-containing solutions when flushing arterial lines

What Happened?

A dextrose-containing solution was repeatedly used to flush the arterial line of a patient in Bath, UK.¹

This resulted in spuriously high blood glucose readings, excess administration of insulin and hypoglycaemia.

The patient suffered an irreversible brain injury and died.

The Facts:

- Dextrose-containing flush solutions may contaminate blood samples to produce spuriously high blood glucose levels.
  (e.g. 0.1ml 5% dextrose contaminant may raise the sample blood glucose level by 12mmoll⁻¹).

- < 3 hours of hypoglycaemia can lead to fatal neuroglycopaenia²

Protect Your Patients:

- Never use dextrose-containing fluids to flush arterial or central lines. (store dextrose-containing fluids separately)

- If a blood result surprises you, think “is this real or an artefact?”

- Follow your Trust/Departmental guidelines for checking infusion fluids. (review frequently and use transparent pressure bags if possible)