

## Intravenous Fluids - Summary Clinical Guideline

Reference no.:CG-ELEC/2023/002

### Intravenous Fluid Administration for Adults

These guidelines are consistent with the NICE document 174 'Intravenous Fluid Therapy in Adults in Hospital' accessed at: <http://www.nice.org.uk/guidance/cg174>.

All patients receiving IV fluids need regular clinical and biochemical monitoring.

### Maintenance fluids

- Use 4% Glucose / 0.18% Saline (Glucose/Saline) with 20 or 40 mmol/L of KCl at a rate of 1.0 - 1.5 ml/kg/hr.
- Use Hartmann's solution when the plasma sodium is  $\leq 130$  mmol/L and plasma potassium is  $\leq 5$  mmol/L.
- Use 0.9% Saline with 20 or 40 mmol KCl/L when the plasma sodium  $\leq 130$  mmol/L AND plasma potassium  $\leq 3.5$  mmol/L.

### Measure hourly urine output in critically ill patients – actively manage oliguria (< 0.5 ml/kg/hr)

### Rapid volume resuscitation in hypovolaemic patients

- Use 500 ml boluses of Hartmanns solution or 0.9% Saline administered in quick succession. Use 250 ml boluses in elderly/frail patients initially until fluid tolerance has been determined.
- The use of gelatin containing fluids (e.g. Gelofusine or Haemaccel) is not recommended.

### Replacing fluid deficits

- Adjust the IV prescription (add to or subtract from maintenance needs) to account for existing fluid.
- Hartmann's solution is suitable replacement for most fluid losses (when plasma potassium is  $\leq 5$  mmol/L).
- 0.9% Saline with 20 or 40 mmol/L KCl is specifically indicated for losses from nasogastric drain or vomiting.
- 4.5% or 20% Human Albumin Solution for fluid losses with high protein content and/or electrolyte deficits or excesses, as well as ongoing losses.

# Exceptions to this Guideline

The following clinical areas/patient groups have specific fluid management protocols that differ from the general guidance above. Please consult the following specialist documents on Flo before prescribing fluid therapy.



**Chemotherapy patients**



**Contrast induced AKI**



**Critical Care Units (ICU & SDU)**



**Diabetic patients (on sliding scale insulin infusion)**



**Gastrointestinal Bleeding**



**Intra-operative fluid management**



**Liver Disease**



**Obstetric Unit**



**Paediatric patients (< 16 years)**



**Renal disease**