

VASOPRESSIN 10 units in 50ml IV INFUSION for vasopressor effect

Presentation

- Argipressin (synthetic vasopressin) 20 units in 1ml (1ml ampoule)
Vasopressin 20 units in 1ml (1ml vial) unlicensed

Prescribing

Prescribe on the infusion chart.

Usual dose range for vasopressor effects: 0.1- 2 milliunits/kg/min (equivalent to 0.0001- 0.002 units/kg/min). Doses above this must be discussed with consultant intensivist.

1 unit = 1000 milliunits. TAKE CARE WITH UNITS IN CALCULATIONS.
Refer to separate guidance for oesophageal varicies/ upper GI bleeding/
SIADH associated with head trauma.

Storage

Argipressin 20 units in 1ml - refrigerator

Vasopressin 20 units in 1ml unlicensed - room temperature

Preparation/ Dilution

Draw 0.5ml vasopressin 20 units in 1ml into 50ml syringe and make up to 50ml using glucose 5% or sodium chloride 0.9% to give 0.2 units/ml.

NOTE: 0.2 units/ml is the same as 200 milliunits/ml

Route of Administration

Centrally

Preferably the distal lumen

Rate of Administration

Usual range 0.1- 2 milliunits/kg/min

NOTE: this is equivalent to 0.0001-0.002 units/kg/min

Stability

Use immediately- assign 24 hours expiry on the IV additive label

Flushes

Aspirate line.

If line cannot be aspirated, flush with sodium chloride 0.9% at the same rate.

Common Compatibilities at Terminal Y-site

Calcium chloride, noradrenaline, adrenaline, milrinone, heparin.

Contact PICU pharmacist for further advice on compatibilities.

Monitoring/ Other comments

This infusion should only be used under the direction of a clinician with critical care training. Full cardiac monitoring must be used whilst infusing vasopressin.

Tissue damage will occur if vasopressin extravasates - follow the extravasation management policy.

Argipressin is synthetic vasopressin and should be used when vasopressin is prescribed.

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Pump calculation equation

$$\text{Pump rate in ml/hr} = \frac{\text{Dose in milliunits/kg/min} \times \text{weight (kg)} \times 60 \text{ min}}{200 \text{ milliunits/ml (Concentration milliunits/ml)}}$$

Extravasation Risk

Extreme of pH	Hyperosmolar	Vasoactive	Vesicant
Yes pH 2.5-4.5	No	Yes	no

Calculation example

5kg child requiring vasopressin infusion, to start at 0.3 milliunits/kg/min

Prescribe on the smart pump infusion chart.

Prepare as follows:

Draw 0.5ml of vasopressin 20 units in 1 ml into syringe and make up to 50 ml using sodium chloride 0.9%. Label syringe as per Trust Policy. Start pump at 0.45ml/hour, titrating against patient's haemodynamics state.

To check infusion rate:

$$\text{Pump rate in ml/hr} = \frac{(0.3 \text{ milliunits/kg/min}) \times 5 \text{ kg} \times 60 \text{ min}}{200 \text{ milliunits/ml}} = 0.45 \text{ ml/hour}$$