



مستشفى الملك المؤسس عبدالله الجامعي
King Abdullah University Hospital

Parenteral Potassium Phosphate for Hypophosphatemia

- Potassium Phosphate available in KAUH as Potassium Phosphate ampoule for injection (20 ml)
- Each 1 ml contains $0.6 \text{ mmol PO}_4^{-3} + 1 \text{ mmol K}^+$ SO each ampoule contains 12 $\text{mmol PO}_4^{-3} + 20 \text{ mmol K}^+$
- It should be given **only if K^+ level $< 4 \text{ mmol/L}$**
- Normal PO_4^{-3} range : $0.81\text{-}1.45 \text{ mmol/L}$ (in KAUH)



• Dosing:

We use IV Potassium Phosphate only if patient has:

- 1- Symptomatic hypophosphatemia : fatigue, bone pain ,appetite loss, irritability, numbness and confusion
- 2- Sever hypophosphatemia (PO_4^{-3} level $< 0.32 \text{ mmol/L}$)

Dose: $0.08\text{-}0.64 \text{ mmol/kg}$, infusion over (4-12 hrs).

Note: weight is actual body weight (ABW), use adjusted body weight if patient $>30\%$ over IBW. Adjusted body weight= $\text{IBW} + 0.4 (\text{ABW} - \text{IBW})$

- **Preparation for Administration:**

Intermittent infusion doses of potassium phosphate are typically prepared in 100 to 250 mL of NS or D₅W.

The infusion of 15 mmol of PO₄⁻³ in 250 mL of IV fluid over 4 hrs is safe and effective.

[15 mmol PO₄⁻³] [250 ml diluent] [4-6 hours infusion rate]

[30 mmol PO₄⁻³] [500 ml] [8 hours infusion rate]

- Assess adequate replacement, repeat serum potassium and phosphorus levels 2 to 4 hours after dose, also monitor renal function.

Example:

Patient has PO₄⁻³ level (0.4 mmol/L) with hypophosphatemia symptoms , his weight is 70 kg .(IBW=65 kg)

The dose range from $0.08 * 70 = 5.6$ mmol to $0.64 * 70 = 44.8$ mmol

Each ampoule (20 mL) —————> 12 mmol PO₄⁻³

X —————> 5.6 mmol PO₄⁻³

So I need 9.33 mL (I draw 10 mL from the ampoule and add them to NS or D5W)

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The supervisor of Drug Information Center

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