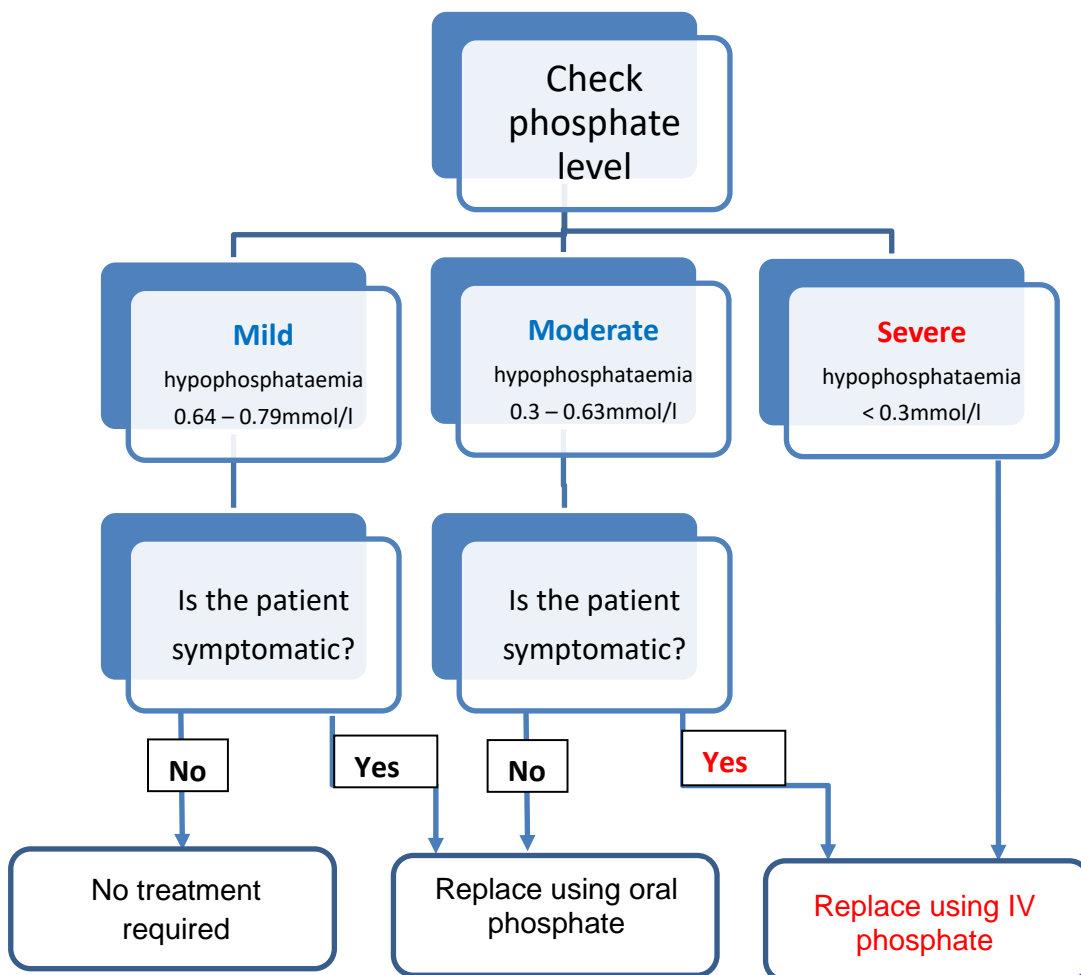


NECTAR GUIDELINES FOR MANAGEMENT OF HYPOPHOSPHATEMIA IN CHILDREN

Management of hypophosphatemia will depend on blood phosphate levels and patient symptoms.

A) Algorithm for phosphate management



Signs and symptoms of hypophosphataemia

- Fatigue
- Muscle weakness and pain
- Rhabdomyolysis
- Bone pain and skeletal disorders
- Altered mental status, confusion, disorientation, hallucinations, delirium
- Seizures
- Focal neurological deficits
- Paraesthesia
- Haemolysis of erythrocytes
- Abnormal leukocyte and thrombocyte function
- Abnormal liver function tests
- Congestive heart failure
- Acute kidney injury
- Respiratory failure due to reduced respiratory muscle function
- Coma

B) Phosphate preparation & doses

Oral phosphate correction:

Age	Initial dose (then adjust according to serum levels)
Neonate	1 mmol/kg/day in 1-2 divided doses
1 month to <5 years	2-3 mmol/kg/day in 2-4 divided doses (maximum 48 mmol/day)
5 years and over	2-3 mmol/kg/day in 2-4 divided doses (maximum 97 mmol/day)

- Duration: a 3-day course of oral phosphate supplements should be prescribed initially, and the duration then adjusted according to serum phosphate levels (see section 3.5 'Monitoring').

Intravenous phosphate correction:

Dosage, preparation & administration on a PAEDIATRIC WARD:

Age	Dose (prescribe as ONCE only)	Infuse over a MINIMUM* of	Preparation		
			Phosphate polyfusor [#] Contains: Na 81mmol in 500ml K 9.5mmol in 500ml PO4 50mmol in 500ml	Sodium glycerophosphate 21.6% (Glycophos [®]) Contains: Na 40mmol in 20ml PO4 20mmol in 20ml	
Neonate	1 mmol/kg	20 hours	PERIPHERAL OR CENTRAL ADMINISTRATION: Give neat	PERIPHERAL ADMINISTRATION: Dilute to a maximum concentration of 0.05 mmol/ml	CENTRAL ADMINISTRATION: Dilute to a maximum concentration of 0.1 mmol/ml
1 month to < 2 years	0.7 mmol/kg (max. 20mmol)	14 hours			

2 years and over	0.4 mmol/kg (max. 20mmol)	8 hours		phosphate with sodium chloride 0.9% or glucose 5%	phosphate with sodium chloride 0.9% or glucose 5%
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* Length of infusion is the same for both peripheral and central line administration.

* IV phosphate corrections should be prescribed as ONCE only infusions.

C) Monitoring

- Serum phosphate:
 - Levels should be checked 1-2 hours after an IV correction has been given.
 - Monitor phosphate levels 6-hourly in severe, symptomatic hypophosphataemia.
 - Monitor phosphate levels daily in moderate hypophosphataemia, until back in normal range.
- Serum calcium, magnesium, potassium, and sodium.
- Blood pressure and ECG monitoring is required if:
 - Treating severe hypophosphataemia, OR
 - The phosphate infusion rate exceeds 0.05mmol/kg/hour.
- Renal function.
- Fluid balance.

**** Please contact NECTAR if you have any concerns.**