Service: Scarborough, Hull, York Pathology Service

Filename: UI/BI/001 hypophosphataemia (HULL) or CB-INF-HYPOPHO (Y&S)

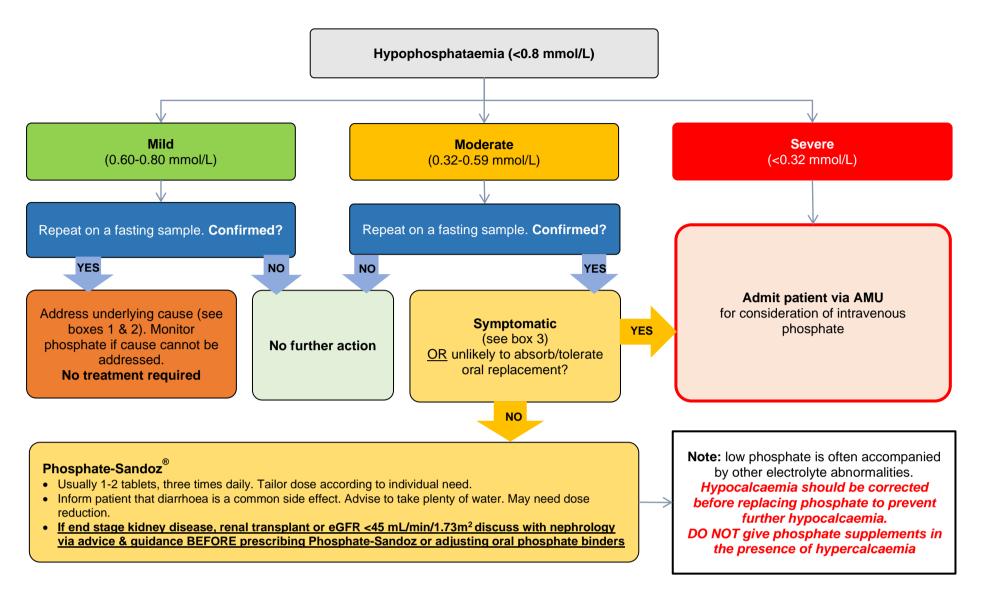
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Approver: Gemma Minett (Hull) or Daniel Turnock (Y&S)



Location: Electronic copy on Q-Pulse (Free to Print), Website

Information for Primary Care: Management of Hypophosphataemia



| Box 1. Causes of low phosphate. Common causes are listed in bold. | | | | | | |
|---|---|--|--|--|--|--|
| Redistribution into cells | Decreased intestinal absorption | Increased urinary excretion | | | | |
| Post-prandial Respiratory alkalosis (hyperventilation) Refeeding syndrome Recovery from DKA Medications (insulin) Sepsis Malignancy, particularly haematological Hungry bone syndrome (post parathyroidectomy) | Vitamin D deficiency Chronic diarrhoea Steatorrhoea Malabsorption Malnutrition or severe dietary phosphate restriction Phosphate binders in ESKD/CKD patients Antacid abuse | Alcohol Hyperparathyroidism and/or hypercalcaemia Disorders of vitamin D metabolism Post kidney transplant Renal tubular defects, incl. Fanconi syndrome (rare) Paraproteinaemia Acidosis Extensive burns Medications (diuretics, acetazolamide, iron infusions, certain chemotherapy drugs e.g. cisplatin, antivirals, aminoglycoside antibiotics anticonvulsants and other CYP450-inducing agents) FGF-23 dependent causes (rare) | | | | |

| Box 2. Further Investigations | | | | | | |
|---|------------------|-----------|-----------|-----|--|--|
| Urea & Electrolytes | Adjusted Calcium | Magnesium | Vitamin D | PTH | | |
| TmP/GFR (Rarely required: refer to https://tinyurl.com/BiochemInfo for further information) | | | | | | |

| Box 3. Symptoms associated with phosphate depletion Note symptoms are uncommon except in severe phosphate depletion or at the very low end of the moderate range. | | | | | | |
|--|---------------------|-------------------------------|--|---|--|--|
| Musculoskeletal | Respiratory | Cardiovascular | Neurological | Other | | |
| Bone pain, myopathy, rhabdomyolysis, weakness | Respiratory failure | Arrhythmia, cardiomyopathy | Irritability, confusion, convulsions, coma | Fatigue, lethargy, anaemia, bleeding, infections | | |

References

Lab Tests Online: https://labtestsonline.org.uk/tests/phosphate; (Accessed: 10th October 2022)

Hypophosphataemia: https://patient.info/doctor/hypophosphataemia#nav-0; (Accessed: 10th October 2022)