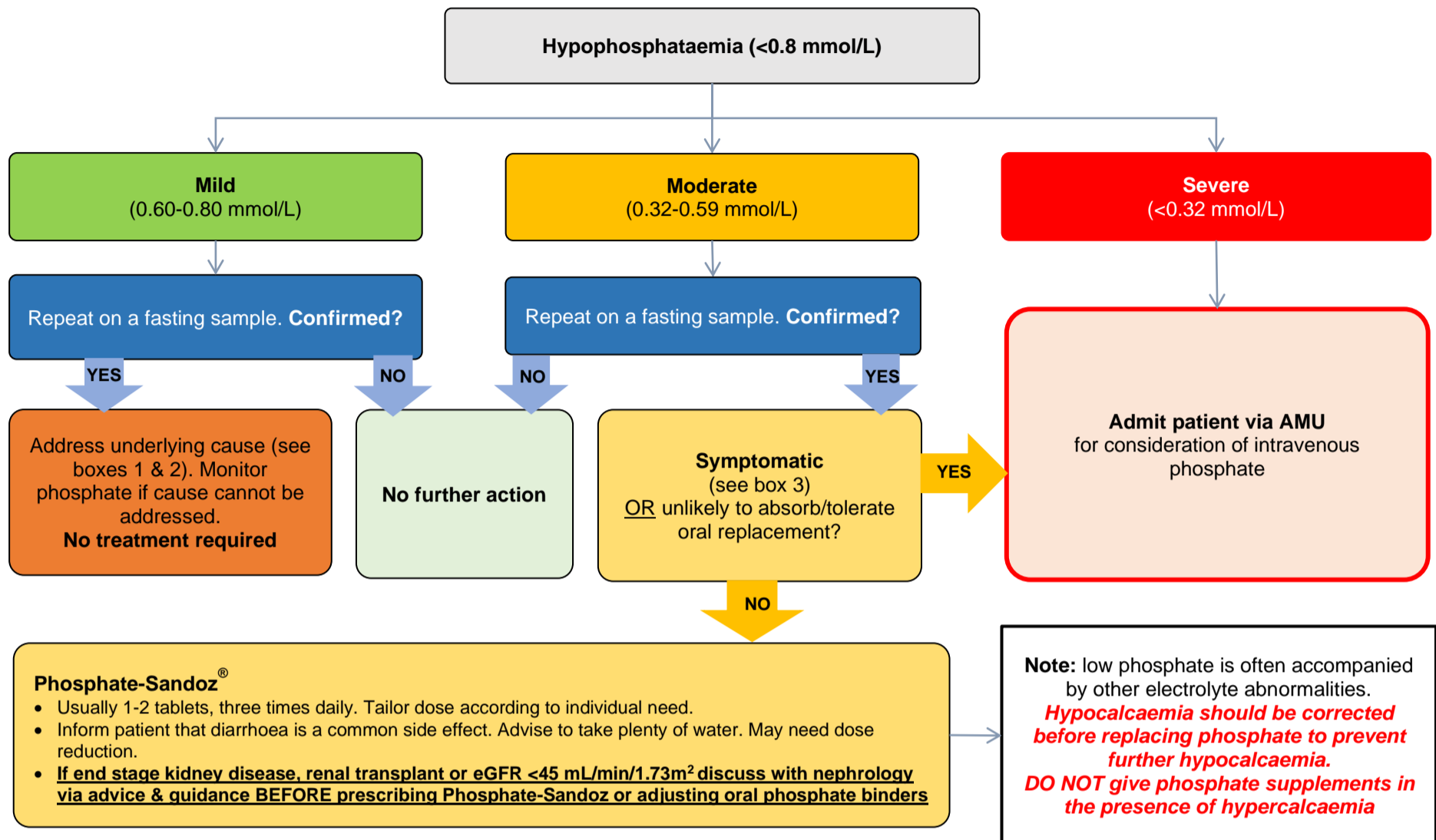


Information for Primary Care: Management of Hypophosphataemia



Box 1. Causes of low phosphate. Common causes are listed in **bold**.

Redistribution into cells	Decreased intestinal absorption	Increased urinary excretion
<ul style="list-style-type: none"> • Post-prandial • Respiratory alkalosis (hyperventilation) • Refeeding syndrome • Recovery from DKA • Medications (insulin) • Sepsis • Malignancy, particularly haematological • Hungry bone syndrome (post parathyroidectomy) 	<ul style="list-style-type: none"> • Vitamin D deficiency • Chronic diarrhoea • Steatorrhoea • Malabsorption • Malnutrition or severe dietary phosphate restriction • Phosphate binders in ESKD/CKD patients • Antacid abuse 	<ul style="list-style-type: none"> • 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)