

APPENDIX 4

Electrolyte Replacement Management of Patients at Risk of Refeeding

Supplement potassium, magnesium and phosphate as detailed below in presence of normal renal function providing serum potassium, magnesium and phosphate are not above the normal range.

Potassium

40mmol potassium chloride in 1 litre normal saline over 12 hours and repeated over next 12 hours. Daily replacement is therefore 80mmols potassium (40mmol/24hrs if eGFR less than 60).

Magnesium

20mmol (5g) magnesium sulphate in 500ml sodium chloride 0.9% over at least 5hr (10mmol over at least 5hr if eGFR less than 60).

Both potassium and magnesium can be given in the same bag (run over 12hr). Maximum of 40mmol of potassium with 10mmol of magnesium in 1L of sodium chloride 0.9% over 12hr (repeat if eGFR greater than 60).

N.B. If only magnesium is low give 20mmol magnesium sulphate in 500ml of sodium chloride 0.9% over at least 5hr (if renal impairment eGFR less than 60 reduce the dose to 10mmol over at least 5hr).

Phosphate

Give 20mmol of phosphate over 24 hours

Give 10mmol phosphate over 24hrs if eGFR less than 60ml/min

Use a phosphate polyfusor (50mmol of phosphate in 500ml)

Phosphate polyfusor also contains 9.5mmol potassium in 500ml

Infuse the required volume from the polyfusor via an infusion pump. Set the pump to administer the required volume of infusion over 24 hours.

For a dose of 20mmol phosphate the volume of infusion is 200ml (8.4ml/hour over 24 hours). Discard the remainder of the polyfusor after 24 hours.

For a dose of 10mmol phosphate the volume of infusion is 100ml (4.2ml/hour over 24 hours). Discard the remainder of the polyfusor after 24 hours.

Do not infuse phosphate polyfusor via the same line as any other drugs or infusion fluids apart from sodium chloride 0.45% or 0.9% and glucose 5% or 10%

Continue to check serum potassium, magnesium and phosphate daily (Nutrition bloods).

Continue replacing potassium, magnesium and phosphate at least over 48 hours after starting enteral support as risk of refeeding is highest within 24-48 hours of starting enteral feed.

This protocol is derived from NICE Guidelines of 'Nutrition Support for Adults' Feb 2006.

Go back to previous flowchart and follow O3