

Refeeding syndrome – Vitamin replacement

Refeeding syndrome consists of metabolic changes that occur on the reintroduction of nutrition to those who are malnourished or in the starved state. The consequences of untreated re-feeding syndrome can be serious; causing haematologic abnormalities and result in death.

The risk can be reduced by preventing rapid re-introduction of nutrition alongside supplementation and monitoring/correction of electrolytes and vitamins. Vitamin replacement should ideally be done on the same day/before initiating feed in order to try and minimise the risk of developing refeeding syndrome.

The following should be prescribed for patients who are at risk of refeeding syndrome:

Oral:

Thiamine 100mg tablets 2-3 daily in divided doses for 10 days

+

Forceval capsules 1 OD for 10 days

Enteral:

Thiamine 100mg tablets 2-3 daily in divided doses for 10 days (Can be crushed and dispersed in water for administration via enteral feeding tubes)

+

Forceval soluble tablets 1 OD for 10 days. The soluble tablets can be mixed with water prior to administration via enteral feeding tubes.

Intravenous:

- Thiamine (IV): 200mg OD for 3 days (This can be extended to 5 days for patients at higher risk)

IV thiamine should only be used where enteral administration is not possible or contra-indicated. IV thiamine should be reviewed daily and where possible, switched to either the oral or enteral options as outlined above.

IV thiamine is not licensed for use in the UK, and so should be prescribed in line with the DBTH Unlicensed Medicines Policy.

For administration, dilute with glucose 5% or sodium chloride 0.9% to a suitable volume (e.g. 50mL, 100mL, 250mL) and administer over 30 minutes using an infusion pump, either centrally or via a large peripheral vein.

The above should be continued while an inpatient or until 10 days have passed (not for discharge), or can be given for longer if specifically requested by the Dietitians/Nutrition team.

High risk of re-feeding syndrome if:

One or more of the following:

- BMI less than 16 kg/m²
- Unintentional weight loss >15% within last 3-6 months
- Little or no nutritional intake for more than 10 days
- Low levels of [potassium](#), [phosphate](#), calcium or [magnesium](#) prior to feeding

Two or more of the following:

- BMI less than 18.5 kg/m²
- Unintentional weight loss >10% within the last 3-6 months
- Little or no nutritional intake for more than 5 days
- A history of alcohol abuse or drugs including insulin, chemotherapy, antacid or diuretics

Author: Dan Pawley, Specialist Clinical Pharmacist, Critical Care & Nutrition

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