Severe fluid and electrolyte shifts associated with intiating nutritional support in malnourished patients

POTENTIAL CONSEQUENCES

- Cardiac failure
- Pulmonary oedema
- Dysrhythmias
- Coma
- Acute fluid overload (or depletion)

- Hypophosphataemia
- Hypokalemia
- Hypomagnesaemia
- Hyperglycaemia
- Occasionally hypocalcaemia

PATIENTS AT RISK

PATIENTS AT HIGH RISK OF REFEEDING SYNDROME

2 OR MORE FACTORS

- Minimal food intake for >5 days
- BMI <18.5kg/m^2
- Unintentional weight loss >10% within last 3-6 months
- History of:
  - Alcohol abuse
  - Chemotherapy
  - Medications:
    - Insulin / Antacids / Diuretic

1 OR MORE FACTORS

- Minimal food intake for >10 days
- BMI <16kg/m^2
- Unintentional weight loss >15% within past 3-6 months
- Pre-feeding:
  - Hypokalemia,
  - Hypophosphataema
  - Hypomagnesaemia

FEEDING REGIMENS

Refer and consult with dietitians early
Aim to achieve enteral route as soon as possible

Start at max 10kcal / kg / day

Increase slowly over 4-7 days to exceed full needs

Start at max 5kcal / kg / day for extreme cases:

- Minimal food intake for >15 days
- BMI <14kg/m^2

VITAMIN REPLACEMENT

Consult local guidelines / policy

Consider starting IV then convert to PO

Start immediately before and during first 10 days of feeding

ORAL

THIAMINE 200-300mg OD

VITAMIN B CO STRONG
1-2 tablets TDS

INTRAVENOUS

Pabrinex 1-2 pair OD - TDS

FLUID / ELECTROLYTE REPLACEMENT

- Follow Fluid Management guideline
- Replace fluid with caution to avoid causing fluid overload
- Consider carbohydrate content of fluid:
  - 1L 5% dextrose contains 200 Kcal

Follow individual electrolyte replacement guideline

Always discuss with Senior if unsure

MONITORING

- **4 Hourly**
  - BMs until stable and then daily
- **Daily:**
  - Body weight
  - U&E / Mg / PO_4 / Ca
  - Until stable then 1-2 x week
- **Twice weekly:**
  - LFTS, weekly when stable
- **Weekly:**
  - Albumin