Dietetic support for young people with eating disorders

SARAH FULLER
ADVANCED SPECIALIST EATING DISORDERS DIETITIAN
EAST LONDON NHS FOUNDATION TRUST
What we will cover

• Refeeding and underfeeding
• NGT feeding
• NGT feeding under restraint
Refeeding syndrome

The change in the body’s metabolism from the starved state (catabolic) to the fed state can cause:

• Sudden release of insulin
• Shift in electrolytes
  • Low blood levels of Phosphate, Magnesium, Potassium and Calcium
• Muscle weakness
• Neurological changes: Confusion / Seizures / Fits
• Cardiac abnormalities: abnormal heart rate, rhythm and ultimately cardiac arrest
• Deranged fluid balance e.g. puffy ankles
• Associated with significant morbidity and mortality
• Can be seen regardless of the route of nutrition: oral diet, NGT or TPN
Hypokalaemia
Hypomagnesaemia
Hypophosphataemia
Thiamine deficiency
Salt & water retention – oedema

↑ Glucose uptake
↑ Uptake of K^+\text{, Mg}^{2+}\text{, PO}_4^{2-}
↑ Utilisation of Thiamine

↑ Insulin secretion
Refeeding
CHO main source of energy (anabolism)

Glycogen stores utilised
↓ Insulin production & ↑ Glucagon secretion

Gluconeogenesis = Protein catabolism & mobilisation of lipid

Protein, fat, mineral, electrolyte & vitamin depletion – sodium & water intolerance

Refeeding syndrome

Adapted from Stanga et al (2008) EJCN, 62:687
Refeeding in hospital

Refeeding syndrome is RARE

The majority of patients will be managed safely in the community.

If RED risks identified from MEED – discuss with Paediatrics (admission not always needed though)

Good working relationships with local Paediatrics is key – if not in place already, try to establish:

- Identify a nominated Paediatrician – can lead to less admissions!
- Local admission pathway
- Emergency admission meal plans
- Skilling up paediatric nurses re meal support (not just RMNs) – empower parents to do meal support
- CYP-ED team in-reach
Refeeding

Restoring regular eating and weight gain is the most effective treatment for the cardiac abnormalities seen in underweight patients.

HIGH RISK PATIENTS WHO MAY NEED MEDICAL STABILISATION:

Full risk assessment – MEED

• Rapid weight loss >1kg/week
  • Acute onset = no physical adaptation
• Severe malnutrition <70%mBMI
• Abnormal electrolytes
• Low white blood cell count - <3.5 x 109/l
  • But if raised CRP (infection) this is not reliable
Refeeding – monitoring

Refeeding bloods:
• U&E’s, LFTs, Ca, Mg, PO₄
• Day 1, 3, and 7 unless indication to do more frequently

Physical health observations:
• BP, pulse, temperature
• Weight (monitor for fluid retention)
• ECG – repeat if abnormal

Nutritional supplementation
• Correct any abnormal biochemistry
• Prophylactic supplementation - evidence unclear
  • Can consider Thiamine 200mg daily for first 14 days

If refeeding syndrome is suspected, do not continue with calorie increase until stabilised – DO NOT REDUCE INTAKE
Refeeding v’s underfeeding

Avoid underfeeding' syndrome

• when weight loss while inpatient due to inadequate caloric input to support rapid weight gain and medical stabilization
• Underfeeding leads to further medical instability
• It often occurs because the clinician is afraid of complications associated with the refeeding syndrome.
• Failure to adequately feed the patient can be fatal.
Refeeding meal plans

Research suggests that for those at HIGH risk and require a Paediatric admission:

• It is ok to start at 1,400kcal/day, increasing by 200kcal/day if biochemistry stable (U&E’s, LFT’s, Ca, Mg, PO₄).
  • Can be ‘portioned plans’ ½, ¾ to full portions etc...
  • Anticipatory anxiety will always be high

• Global trend is towards higher starting calories
• Ensure that ‘underfeeding’ does not happen

Majority of patients will not require a Paediatric admission and therefore it is safe to start on 1,500kcal/day or 2,000kcal/day meal plan

• Ensure it is never less than current intake
Refeeding meal plans

Top tips
- 2 copies one for patient (no calories) one for nursing team
- Do NOT talk about calories to the patient
- Do NOT comment on the food ‘that looks nice’ ‘you must have been hungry’
- ‘Food is medicine’
- Accurate food record charts are really important
- Minimal negotiation – 3 pre-illness dislikes (not whole food groups)
- Distraction techniques helpful
- Bathroom before meal/snack
- Clear guidelines on time to eat
  - 30mins main /10mins snack

<table>
<thead>
<tr>
<th>Day</th>
<th>Meal Ideas and Nutritional Supplements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>1 cup cereal (40g) + 1 cup milk (200mls) or Slice of toast with spread and topping or 135mls Nutritional Supplement (1.5kcal/ml)</td>
</tr>
<tr>
<td>Mid Morning</td>
<td>Biscuits x 2 or cereal bar and glass of milk (200mls) or Large pot of full fat yogurt or 135mls Nutritional Supplement (1.5kcal/ml)</td>
</tr>
<tr>
<td>Lunch</td>
<td>½ sandwich with filling (with spread) or ½ jacket potato and filling or ½ tin of soup with 1 x bread (with spread) or 135mls Nutritional Supplement (1.5kcal/ml)</td>
</tr>
<tr>
<td>Mid afternoon</td>
<td>Biscuits x 2 or cereal bar and a glass milk (200mls) or Larger pot of full fat yogurt or 135mls Nutritional Supplement (1.5kcal/ml)</td>
</tr>
<tr>
<td>Evening meal</td>
<td>½ carbohydrate measure, ½ protein measure and small amount of vegetables or 135mls Nutritional Supplement (1.5kcal/ml)</td>
</tr>
<tr>
<td>Supper</td>
<td>1 cup cereal (40g) or 1 cup milk (200mls) or Slice of toast with spread and topping or 135mls Nutritional Supplement (1.5kcal/ml)</td>
</tr>
<tr>
<td>Total</td>
<td>1200 Kcal</td>
</tr>
</tbody>
</table>
NGT feeding

Be cautious in starting, needs long discussion with the patient – especially those with ASD and emotional dysregulation.

Can help promote weight gain/physical health restoration and reverse starved state to transition to oral diet.

Understand MHA ‘least restrictive practice’ considerations.

NGT feeding under physical restraint

Don’t back people into a corner

BUT can save someone’s life – identify your exit strategy

Guidance available:

• Dietetic practice

• Legal & ethical

• Nursing practice
  • Out soon!
NGT feeding under restraint

• Requires detention under the MHA
• Only staff who are trained in restraint practices can facilitate this
• Therefore the principle of least restrictive practice applies and standard paediatric NGT feeding protocols need to be adapted
• Top tips:
  • 2 bolus feeds a day
  • Push syringe bolus
  • Start at 500ml per bolus and is safe to go up to 1,000ml/bolus
  • Higher Fr NGT will aid the passing of enteral feed
  • Use ‘compact’ sip feeds, and products as calogen or 5cal to minimise volume of feed
  • Can thin this mix slightly with water
  • 1,000ml can safely be delivered in ~10mins
  • Always have an exit strategy