Medical Monitoring in Eating Disorders	Which ED	Effect of starvation / malnutrition	Frequency of review or repeat management	Indications for medical admission to manage acute severe malnutrition & prevent refeeding syndrome	
				Child & Adolescent	Adult
Vital signs: Supine & standing BP and HR Core Temperature	AN AAN BN AN like illnesses ARFID	Indicators of autonomic & metabolic adaptation to starvation	 On initial assessment At least weekly for clients significantly underweight or who have lost significant weight or are continuing to lose weight; At least weekly: frequent self-induced vomiting or laxative misuse Regularly if fluid depleted 	 Bradycardia – HR <50bpm Orthostatic systolic hypotension >20 mmHg Systolic hypotension <80mmHg in children <12yo, <90mmHg in ≥12yo – 18yo Postural tachycardia >30bpm Recurrent syncope Hypothermia <35.5°C 	 Resting HR ≤ 40bpm or >120bpm Postural tachycardia > 20bpm increase on standing Systolic BP < 80mmHg Orthostatic hypotension >20 mmHg systolic drop on standing Hypothermia (<35 °C) Blood sugar <2.5mmol/l
Blood tests: Full Blood Examination Urea, Electrolytes & Creatinine Phosphate, Calcium, Magnesium, Glucose, Liver Function Test	AN AAN BN AN like illnesses ARFID	Low WCC / low neutrophil count can indicate starvation induced bone marrow suppression Abnormal LFTs can indicate starvation or refeeding induced hepatitis (transaminitis)	 On initial assessment Acute food refusal Weekly: Ongoing weight loss > 0.5kg / week Weekly: frequent self-induced vomiting or laxative misuse 	 Hypokalaemia Hyponatraemia Hypophosphataemia Hypoglycaemia	HypokalaemiaHyponatraemiaHypophosphataemia
ECG	AN AAN BN AN like illnesses ARFID	If Bradycardia present when awake, it will be more severe when asleep & is associated with the autonomic suppression seen in adaptation to starvation. Small voltages indicate a thinner (wasted) heart wall		 Arrhythmia Bradycardia – HR < 50bpm Prolonged QTc >450msec 	 Arrhythmias Rate< 40bpm Prolonged QT interval
Body weight % change in body weight Charting / graphing %mBMI (children & adolescents)	AN AAN BN AN like illnesses ARFID	Loss of body weight in children & adolescents is abnormal. Short term loss with no recovery, and / or faltering of height growth is an alert for review and intervention	On initial assessment. Weekly for clients significantly underweight, continuing to lose weight, or experience marked weight fluctuations	 0.5 – 1kg weight loss per week over several weeks < 70% mBMI 	 >1kg ongoing weight loss per week over several weeks BMI< 13
Height	AN AAN BN AN like illnesses ARFID	Prolonged poor nutrition indicated by static height or height not following previous developmental percentile course > 6 – 12 months.	On initial assessment & 3 monthly review in clients who should be growing	N/A	N/A
Micronutrients: Vitamin B12 Folate Iron Studies Vit D	All eating disorders	May be impaired due to general malnutrition or restricted food variety	On initial assessment & reviewed as clinically indicated Supplement as indicated Encourage improved food variety & quantity	N/A	N/A

Medical Monitoring in Eating Disorders	Which ED	Effect of starvation / malnutrition	Frequency of review or repeat management	Indications for medical admission to manage acute severe malnutrition & prevent refeeding syndrome	
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Menstrual function: frequency & quality of menses ovarian ultrasound	All eating disorders	Starvation induced suppression of hypothalamic-pituitary-gonadal axis Ovarian ultrasound may be helpful in indicating return of menses & minimal healthy weight If other indicators are insufficient	Review menstrual function on initial assessment & routinely , to note changes	N/A	N/A
Other behaviours: Eating & Drinking: Severe food restriction or acute food refusal Severe fluid restriction or acute fluid refusal Increased frequency of purging behaviours Physical Activity: Exercise, incidental activity & weight controlling physical activity	All eating disorders	Restriction of food (& fluids) is a core behaviour/symptom in many EDs Physical activity aimed at weight control may be a primary weight control behaviour, or a behaviour to compensate for binge eating Starved individuals may have difficulties with restlessness	Acute worsening in any of these symptoms requires increased frequency of medical monitoring; medical admission may be indicated	Acute food & / or fluid refusal > 3days Significant dehydration	Acute food & / or fluid refusal > 3 – 5 days
Bone Bone density assessment	AN AAN BN AN like illnesses ARFID	Starvation induced osteopenia & osteoporosis Related to suppression of ovulation & cortisol changes Swift weight & nutrition status recovery is the best protection for bone mineral status.	 Consider bone mineral density scan: Children & young people > 1 year underweight (corrected for bone age in those with faltering growth) Adults > 2 years underweight Scan earlier if experiencing bone pain or recurrent fractures Review: no more than yearly unless experiencing bone pain or recurrent fractures See guidelines for endocrine interventions 	N/A	N/A

References:

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