

Key Physical Assessment Parameters and Action Points for Younger Patients*

Check for/measure	What to look for	High risk	Specific management
Heart rate	Bradycardia	HR < 50 bpm	Nutrition
	Postural tachycardia	Or symptomatic postural tachycardia	ECG
ECG (especially if bradycardic or any other CVS complication)	Other cause for bradycardia (heart block)	Prolonged QTc HR <50 bpm	Nutrition and correct electrolyte abnormalities QTc >450 msec: bed rest, discuss with cardiologist,
	Arrhythmia	Arrhythmia associated with malnutrition and or electrolyte disturbances	Medication likely to be unhelpful unless symptomatic or tachycardic, should correct with nutrition and correct electrolytes
	Check QTc time (using Bazett's formula **)		
	Check electrolytes, rule out genetic etiology or drug effects (e.g. prescribed medications and illicit drug use)		
Blood pressure	Hypotension-refer to	Systolic, diastolic or mean arterial pressure below the 0.4 th centile for age and sex***	Nutrition, bed rest until postural hypotension improved, echo likely to be abnormal while malnourished
	Standardized charts for age and sex	and/or postural drop of more than 15 mmHg	
Hypothermia	Temperature <36° C		Nutrition
	will usually be accompanied by other features,		Blankets
	beware <35° C		

Dehydration	Hypotension and bradycardia related to malnutrition usually not acute dehydration	Significant dehydration and malnutrition	ORS orally or via NG preferred treatment unless hypovolemic, beware of giving fluid boluses unless hypovolemic (may have cardiac compromise or be hyponatraemic, check electrolytes and renal function)
Hypovolemia	Tachycardia or inappropriate normal HR in undernourished young person, hypotension and prolonged capillary refill time		Senior paediatric review, normal saline 10 ml/kg bolus then review; if IV fluids are used then these should usually be normal saline with added electrolytes (e.g., KCL, phosphate) as required. Consider other factors (intercurrent sepsis as a contributor)
Other features of severe malnutrition	Lanugo hair Dry skin Skin breakdown and/or pressure sores		Nutrition, if skin breakdown or pressure sores seek specialist wound care
Evidence of purging	Low potassium Metabolic alkalosis or acidosis	Hypokalemia as below, uncontrolled vomiting with risk of esophageal and other visceral tears	Specialist nursing supervision to prevent vomiting
Hypokalemia	Likely due to purging, Normal electrolytes level does not exclude medical compromise	Potassium <3 mmol/l admit, consider HDU, PICU or ICU if <2-2.5 mmol/l	Correction IV initially if <3 mmol/l Oral supplements may still be vomited ECG
Hyponatraemia or	Less common but important	Sodium <130 mmol/l admit	If IV correction proceed with care

Hypernatremia	Consider water loading	Sodium > 145 mmol/l, commonly called dehydration	
		Consider HDU, PICU or ICU if <120-125 mmol/l	
Other electrolyte abnormalities	Check PO4, Magnesium, Calcium ECG, any significant abnormalities		Admit, nutrition and correction abnormalities, proceed with care
Hypoglycemia		Hypoglycemia is a relatively rare finding at presentation and implies poor compensation or co-existing illness (e.g. infection) Admit Once re-feeding is established, brief hypoglycemia can be found after meals but should normalize rapidly	Oral or NG correction, where possible (sugar drink, hypostop). IV bolus if severe (altered conscious or mental state; seizures): 5 mls/kg of 10% dextrose. Consider ongoing IV dextrose if no oral input or input unlikely in the presence of initial hypoglycemia. Beware of rebound hypoglycemia after IV dextrose bolus. Glucagon in malnourished patients may not be effective as glycogen storages are likely to be low.

Mental Health Risk or safeguarding family	Suicidality Evidence of self-harm Family not coping	Admit for comprehensive psychosocial assessment, admit for place of safety if necessary	Admit to psychiatric unit, apply safeguarding procedures, consult tertiary eating disorder program
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