Bottom Line Recommendations: Summary of Pediatric Emergency Care Information for Healthcare Providers

Eating Disorders

Eating disorders are complex biopsychosocial disorders with significant medical sequelae and a high mortality rate. They exist across diverse populations regardless of age, race, ethnicity, gender, sexual orientation, body habitus and socioeconomic background. Over the past several years, eating disorder diagnoses have increased globally.

- Early intervention is associated with better outcomes, however there is practice variability in admission criteria and treatment for eating disorders across Canada.

This document addresses the acute medical and psychiatric complications of eating disorders presenting to the Emergency Department (ED). Many patients seen in the ED for other complaints may have undiagnosed disordered eating.

Initial Assessment

HISTORY

- **Disordered eating behaviours:** characterize the type and frequency of behaviours (fasting, bingeing, purging, excessive exercise), quantify current daily intake, determine weight changes and duration of symptoms (amount of weight loss/failure to gain weight during a period of growth, growth or pubertal delay).
- **Concerning symptoms/risk factors for hospitalization:** see Table 1.
- **Mental health status:** screen for suicidality and self-harm. Refer to TREKK's Suicidal Risk Screening and Assessment Recommendations.
- **Social:** assess the social and familial context and determine barriers to outpatient care, impact on daily activities (i.e., school attendance, drop in grades or activity level, withdrawing from friends).

PHYSICAL EXAMINATION

- Weight and height (compare to previous, if available), % median BMI (see Table 1) or % weight loss
- Orthostatic vital signs with patient supine for 3-5 min, then standing after 3-5 min. If unable to stand, record while the patient is sitting with feet dangling.
- Temperature and hydration status
- Other changes: lanugo hair, skin integrity (e.g., ulcers/skin breakdown), bruising, muscle wasting, dentition, swollen salivary glands, signs of self-harm

EATING DISORDERS CANNOT BE EXCLUDED BASED ON BODY HABITUS/BMI. PATIENTS MAY PRESENT WITH NORMAL/HIGH BMI FOR AGE AND STILL BE MEDICALLY COMPROMISED.

Management

If concerns for eating disorder behaviors identified, contact local Eating Disorder Specialist (Adolescent Medicine, Eating Disorder Program, Pediatric Referral Centre) for disposition plan.

SUGGESTED INVESTIGATIONS[1]

Laboratory investigations may still be within normal limits even in cases of severe malnutrition. Normal values do not rule out an eating disorder.

- CBC/differential, electrolytes, calcium, magnesium, phosphate, urea, BUN/creatinine, glucose, albumin, alkaline phosphatase, amylase, AST, ALT, CRP. If not already done, add: TTG, IgA, TSH, urinalysis, b-HCG (if applicable).
- 12 lead ECG; assess rate, rhythm, and calculate QTc.

MANAGE ACUTE COMPLICATIONS

Patients with eating disorders often present with poor perfusion and even chronic hypotension. If no concern for sepsis and/or altered mental status: DO NOT BOLUS ANY IV FLUIDS.

- Hypoglycemia: correct ORALLY or by NG with meal replacement (e.g., Boost®).
- Hypotension: alterations of vital signs and even hypotension is common. Assess for alternate causes for hypotension (e.g., sepsis). If none, eating disorder-related vital sign instability will correct over time with management of the eating disorder.

Table 1: Factors Supporting Hospitalization for Youth with Eating Disorders[1]

Severe Malnutrition	– % median BMI* ≤ 75%, < 75% of treatment goal weight (if known) – Severe and/or rapid weight loss resulting in moderate to severe malnutrition
Physiological Instability	– Bradycardia: daytime HR < 50 bpm, nighttime HR < 45 bpm – Hypotension: BP < 90/45 mmHg – Hypothermia: temperature < 35.6°C – Orthostatic hypotension: HR increase ≥ 40 bpm and postural drop in SBP ≥ 20 mmHg or DBP ≥ 10 mmHg
Fluid and Electrolyte Disturbance	– Severe dehydration – Hypokalemia, hyponatremia, hypophosphatemia and/or hypoglycemia
ECG Abnormalities	– Prolonged QTc > 450 ms – Arrhythmia
Acute Medical Complications of Malnutrition and/or Binge/Purging Behaviours	– Syncope – Seizure – Cardiac failure – Pancreatitis
Psychiatric	– Acute psychiatric emergencies (e.g., suicidal ideation, acute psychosis)
Other	– Acute food refusal – Arrested growth and development – Excessive bingeing/purging

**median BMI (mBMI) = 50th percentile of BMI for age and sex*
% median BMI = (current BMI ÷ mBMI) x 100

Patient Disposition

- **Admission:** See Table 1 for factors supporting hospitalization. Admission practices are site specific and may vary with patient and social factors. Discussion is required with local eating disorder specialist, Pediatrics, or Pediatric Referral Center.
- **Discharge:** If admission is not required, a discharge plan for outpatient follow-up should be made in consultation with local eating disorder specialist, Pediatrics, or Pediatric Referral Centre.
- Discharge instructions: **Return to the ED** if complete food refusal >24hrs, acute medical complications (e.g., significant chest pain, syncope, seizure, altered mental status, and/or concern for self-harm/suicidal risk).
- Resources for families: FEAST (multiple languages); ANEB (English and French); CANPED: Online Educational Tool for Parents/Caregivers of a Youth with an Eating Disorder.

Scan or click the QR code to learn more and to see a full list of references and development team members