SSMHealth CardinalGlennon Children's Hospital

Eating Disorder Patients

Emergency Department
Clinical Practice Guideline (CPG)

Protocol approved by: Divisions of Pediatric Emergency Medicine and Adolescent Medicine
Date of approval: 1/20/15

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Eating Disorder Clinical Practice Guideline Algorithm

Identification

- **Red Flags:** Dramatic wt loss, underweight (% of pre-existing wt), food/fluid refusal, dizziness, syncope, chest pain/SOB, constipation, amenorrhea, hx of bingeing/purging, parental concerns; feeding failure even though the patient is currently receiving services; uncontrolled purge cycle
- **History:** timing of wt loss, recent/typical food/fluid intake, wt loss meds (PO/PR) bingeing, purging, menses, mental health issues, SI/HI, water loading, over-exercising

Vital Signs

- **Resting HR & Orthostatics**
  - **If HR <50:** cardiac monitor & EKG
  - **If HR shift >30:** cardiac monitor & EKG
- **Orthostatic BP:** If BP drops >20 mmHg → rehydration is required (see below for reference)
- **Temperature:** If temp < 36°C → re-warming

Growth Parameters

- **(a) Previous wt: _____ kg**
- **(b) Current dry wt** (gown, no shoes): **_____ kg**
- **Wt loss** (a-b): **_____ kg**
- **Percentile: _____ %**
- **Current height: _____ cm**
- **Percentile: _____ %**
- **BMI: _____**
- **Percentile: ____**

Physical Exam

- **Hydration status**
- **Muscular weakness**
- **Mental Status** (slowing/confusion)
- **Skin Ulceration** (back/spine)
- **Bruising**
- **Muscle Wasting**
- **Lanugo**
- **Self harm scars**

Work Up: *

- **CMP, Mg, Phos, iCa**
- **UA**
- **+/- UA, βHCG, UDS**
- **PTT, PT/INR** (hemetemesis)
- **CBC, ESR**
- **Amylase** (purging)
- **EKG:** HR. QT (calc) **
- **TSH/Free T4**
- **Accuchecks q30mins if eating in ED**
- **VS redone q1hr**

- No Red Flags
- Stable HPI
- Stable Labs/Work Up
- Family is reliable for f/u
- No social concerns
- Admission is not indicated

- Abnormal or concerning labs
- Social Concerns
- Anorexia Nervosa
  - <75% ideal body weight or ongoing weight loss despite intensive management
  - Refusal to eat
  - Body fat <10%
  - Heart Rate <50 beats per minute daytime or <45 beats per minute nighttime
  - SBP <90
  - Orthostatic changes in pulse (>20 beats per minute) or blood pressure (>10 mmHg)
  - Temperature <96°F
  - Arrhythmia
- Bulimia Nervosa
  - Syncope
  - Serum potassium concentration <3.2 mmol/L
  - Serum chloride concentration <88 mmol/L
  - Esophageal tears
  - Cardiac arrhythmias including prolonged QTc
  - Hypothermia
  - Suicide risk
  - Intractable vomiting
  - Hematemesis
  - Failure to respond to outpatient treatment

- Contact Adolescent Medicine Team prior to discharge @ 314-268-6406
- If no answer, leave a message with pt's name, DOB, phone #, and referring Dr/facility AND call the Access center & consider transfer
- Send EPIC email to Dr. Marianne Dustan Brady & Dr. Victoria Cornelius with patient's chart attached concerning this ED visit
- Discharge home/Transfer with a discharge set of VS & follow up with PCP for weight re-check
- Have parents call the following after ED visit:
  - Medicaid & Insurance: McCallum Place 314-968-1900
  - Private Insurance: St. Louis Behavioral Medicine Institute (Chesterfield, MO) 636-532-9188
- Supplemental Information for parents: neda.org
- Please see below for further instructions

ACUTE dehydration (optional)

- **IV**: NS 10 ml/kg over 1 -2 hr for 3-5% (mild) dehydration
- **PO:** water/juice 250ml q4hr
- Note: monitor HR & BP during hydration for stress induced tachycardia/HF

Correct Electrolytes:

- **K < 3.5:** add 20-40mmol KCl/L, recheck in 4hrs
- **Na abnormalities:** IV NS hydration, recheck in 4hrs
- **Glucose <80:** 200 ml PO juice, recheck in 30mins; IV glucose should be avoided
- **Phos <0.8:** 500mg PO BID
- **Phos <0.5:** IV phosphate at 0.33 – 0.5 mmol/kg over 6hrs; check levels 1hr post-infusion, then 6hrs after that
- **Mg <0.7:** 500mg PO BID, max dose 2g
- **Mg <0.5:** IV Mg Sulfate 25-50mg/kg/dose q6hr x3doses, max rate 125mg/kg/hr with max dose 2g

ADMIT/TRANSFER to the Adolescent Inpatient Team (orange/purple team)

This algorithm is designed to treat the majority of children & youth presenting to the ED with complaints concerning with an Eating Disorder (ED).

- **Phone Consultation Only of Adolescent Patient:** Access Center RN will
  - Record Demographic Information & Physician Call
  - Place Text Page to Consultation Physician On-Call (AMION)
- **If it is on Monday – Friday between the hours of 8 AM – 4:30 PM**
  - Access Center will ask referring MD to stay on the line
  - AMION to page the following staff:
    - Dr. Marianne Dustan Brady
    - Dr. Victoria Cornelius
- **After Hours (NOT M-F between 8AM – 4:30PM)**
  - Access Center will hang up phone
  - They will consult the ED attending
  - Consult Physician On-Call will call back Access Center within 10 minutes
  - Access Center will set up Recorded 3-way Phone Call (Referring Physician, Consulting Physician & Access Center RN)
  - If patient is instructed to follow-up with clinic please give them the clinic number 314-268-6406 to call the next business day AND inbox Tara, Marianne, Victoria & Theresa Forsythe so they can follow up
  - THE CLINIC IS CLOSED ON FRIDAY, SATURDAY, AND SUNDAY
  - ANY EMERGENCY NEEDS TO COME TO OUR ED FOR TREATMENT
- Please have family call the office to arrange for this appointment. Theresa Forsythe is the POC.

***Electrolyte abnormalities indicative for eating disorders (ED):**

- Glucose: ↓(poor nutrition), ↑(insulin omission)
- Sodium: ↓(water loading or laxatives)
- Potassium: ↓(vomiting, laxatives, diuretics, refeeding)
- Chloride: ↓(vomiting), ↑(laxatives)
- Blood bicarbonate: ↑(vomiting), ↓(laxatives)
- Blood urea nitrogen: ↑(dehydration)
- Creatinine: ↑(dehydration, renal dysfunction), ↓(poor muscle mass)
- Calcium: slightly ↓ (poor nutrition at the expense of bone)
- Phosphate: ↓(poor nutrition or refeeding)
- Magnesium: ↓(poor nutrition, laxatives, refeeding)

- Total protein/albumin: ↑(in early malnutrition at the expense of muscle mass), ↓(in later malnutrition)
- Total bilirubin: ↑(liver dysfunction), ↓(poor RBC mass)
- Aspartate aminotransaminase (AST), alanine aminotransaminase (AST): ↑(liver dysfunction)
- Amylase:↑(vomiting, pancreatitis)

****Significant EKG findings:** Bradycardia or other arrhythmias, low-voltage changes, prolonged QTc interval, T-wave inversions, and occasional ST-segment depression.

Sources:

AED 2011 Eating Disorders: Critical Points for Early Recognition and Medical Risk Management in the Care of Individuals with Eating Disorders. N.p.: n.p., n.d. *FEAST Education Resources*. Academy for Eating Disorders' Medical Care Standards Task Force. Web. 8 Oct. 2014. <http://feast-ed.org/Portals/0/Documents/Library/AED%20Report%202011%20Eating%20Disorders.pdf>.

BC's Provincial Community Hospital Protocol (A): Recommended Care of the Patient with an Eating Disorder in the Emergency Room. N.d. Raw data. Provincial Health Services Authority, Providence.

Cardinal Glennon Inpatient Guidelines to Eating Disorders. 2014. Revised Aug.2014.

Eating Disorders in the Emergency Department: Critical Points for the Recognition & Medical Management of Individuals with Eating Disorders in the Acute Care Setting. N.p.: AED Academy for Eating Disorders, 2012. Print.