Multidisciplinary Management of Eating Disorder on a Pediatric Floor: A Case Series

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BACKGROUND

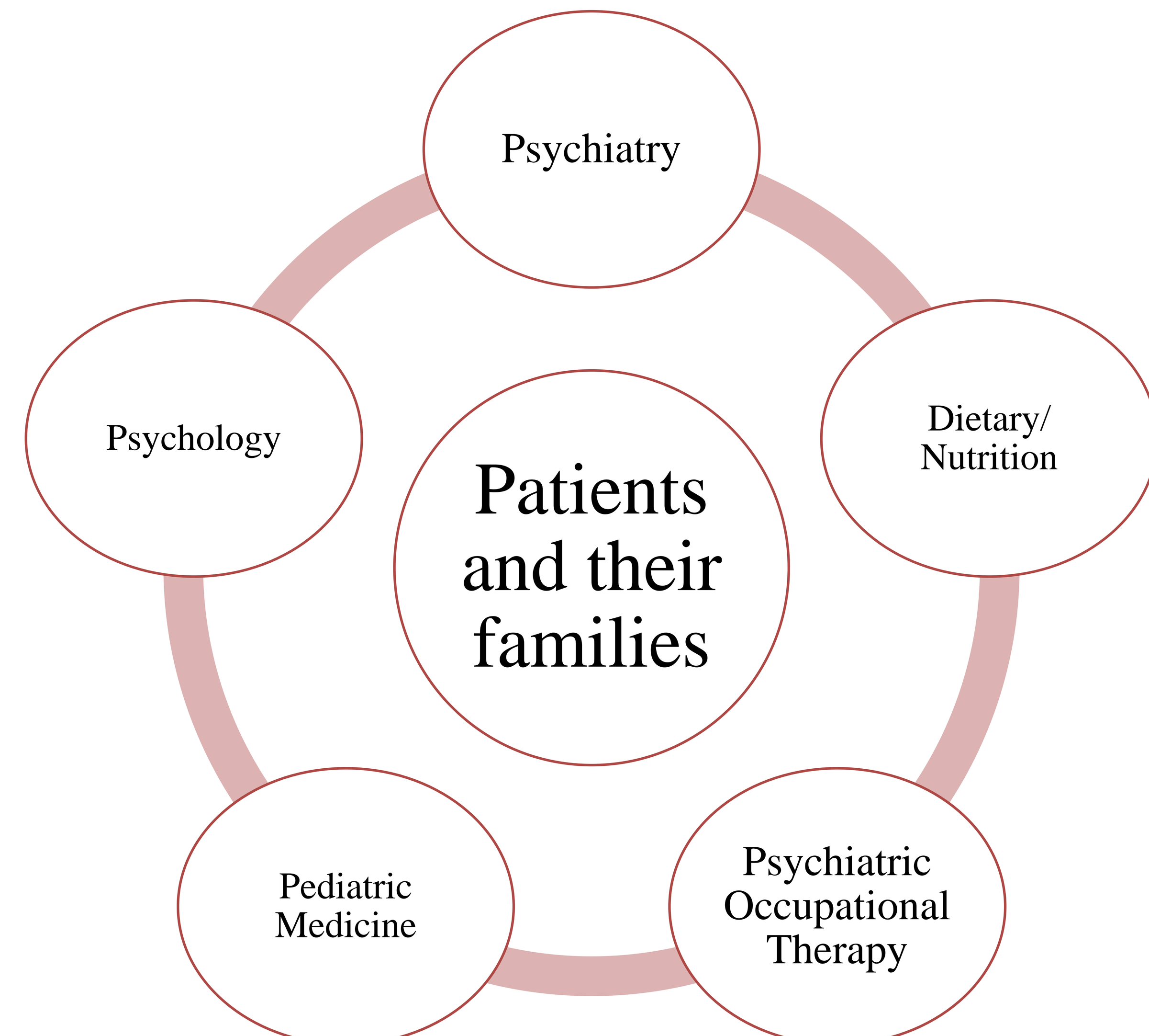
- Prior to the COVID-19 pandemic, an estimated 5.2% of adolescent females met criteria for an eating disorder, with up to 13% meeting criteria for nonspecific eating disorder symptoms during their adolescent years[1].
- Researchers estimate that during the pandemic the rate of emergency room visits and hospitalizations related to eating disorder complications increased by 66% and 37% respectively. With the highest increase in patients with Anorexia Nervosa[2].
- Patients with Anorexia Nervosa typically present to the hospital due to severe symptoms of malnutrition such as including cardiac and vital sign abnormalities, electrolyte imbalances, and severe gastrointestinal distress[2]. These patients also typically experience prolonged length of stays due to their symptoms and required care coordination[2,3]
- In response to the changing landscape of eating disorders patients and increasing need, the American Academy of Pediatrics (AAP) recently released new practice guidelines including a paper by Dr. Hornberger "The identification and management of eating disorders in children and adolescents" outlining medical interventions across eating disorders diagnoses and steps to coordinate care[3]

CURRENT STUDY

- Initiation of therapeutic treatment during medical admission by the Psychiatric Consultation-Liaison team provides an important bridging step for patients prior to engagement with an eating disorders treatment center.
- Our Quality Improvement goal was to complete an examination of our current adherence to practice guidelines as a Psychiatric Consultation-Liaison treatment team.

METHODS

The University of Maryland Medical Center experienced an increase in medical admissions related to eating disorders. To highlight these concerns, we highlight six cases of patients with new diagnoses of eating disorders. We outline protocols to be implemented when caring for a patient presenting with eating disorder related medical complications. Specifically, these protocols include coordinated care across a wide spectrum of specialties including: psychiatry, psychology, pediatric medicine, psychiatric occupational therapy, and dietary/ nutrition.



RESULTS

Age	Sex	Race/ Ethnicity	Presenting features	Length of Stay	Follow-up Care
13	F	W	Pediatrician referral for 15 lbs. weight loss, hypokalemia, bradycardia, lanugo	8 days	Inpatient eating disorder treatment center
10	F	W	Gastrointestinal referral for neutropenia, bradycardia, hypotension after 25 lbs. weight loss over 3-4 months	9 days	Inpatient eating disorder treatment center
14	F	AAPI	Transfer from outside hospital emergency department for vomiting and found to have Superior Mesenteric Artery Syndrome 2/2 20 lbs. weight loss over 2-3 months	10 days	Declined higher level of care, began outpatient Family Based Treatment
14	M	Hispanic	Transfer from outside hospital emergency department for dizziness, bradycardia, hypotensive, 20 lbs. weight loss in 4-6 weeks	36 days	Outpatient care with therapy and medication management
17	F	Black	Chronic vomiting after 43 lbs. weight loss in 2-3 months, pancreatitis	23 days	Inpatient eating disorder treatment facility
14	F	Black	Endocrine referral for poorly controlled Type 1 Diabetes and low BMI since Diabetes diagnosis	3 days	Declined eating disorder specific care, endocrinology following

Adherence to the management of eating disorders in children and adolescents per the American Academy of Pediatrics 2021 Clinical Report

- Our review of treatment of 6 children with identified eating disorders at first presentation to the UMMC Pediatric Hospital indicated that specific guidelines are not consistently followed.

Recommendations outlined in 2021 AAP Clinical Report	Implementation at UMMC with selected eating disorder cases
Screening questions from *Bright Futures Guidelines for Health Supervision of Infants, Children and Adolescents*, fourth edition	0%
Full psychosocial assessment, including a home, education, activities, drugs/diet, sexuality, suicidality/depression (HEADS) assessment	33%
Comprehensive physical exam including monitoring for eating disorder specific changes (cachexia, dental deterioration, skin changes, lanugo, heart murmur, delayed capillary refill, delayed pubertal development, etc.)	100%
Telemetry and vitals monitoring including evaluation for arrhythmias, orthostatic changes, and intake/output	100%
Laboratory monitoring including CBC, CMP, hormones, minerals, and vitamins	100%
Identification of goal weight by height, growth chart trend, age and pubertal status	50%
Evaluation of supplementation needs (potassium, vitamin D and B1, multivitamin, etc.)	100%
Creation and implementation of meal plans with identified nutritional needs and caloric requirements	100%
Monitoring for refeeding after initiation of meal planning	100%

Our treatment and review of cases also indicated a number of additional psychiatric and behavioral management interventions utilized in the care of these patients not specifically outlined in the AAP recommendations.

Psychiatric Interventions

- Diagnosis of eating disorders based on the DSM-5 and appropriate psychoeducation
- Mobilization of multidisciplinary team- Occupational Therapy, Psychology, consultation to eating disorder colleagues
- Discharge and follow-up planning and referrals, likely to eating disorders treatment centers, with the family and primary team
- Evaluation and treatment of psychiatric comorbidities (Major Depressive Disorder, Obsessive Compulsive Disorder, Anxiety disorders)
- Medication management as indicated including consideration of off-label psychotropic use for example: Olanzapine, Cyproheptadine

Psychology and Behavioral Interventions and Recommendations

- Meal exposure and "challenge meal" planning: this process involves coordinated care with nutrition in order to determine appropriately challenging meals. Patients are given the opportunity to try high distress foods. These meals typically contain items that are high in fat or caloric value.
- Coordination of care with nutrition to determine appropriate meal choices. Patients are recommended to eat three meals a day with two snacks and one dessert.
- Coping strategies (e.g., distraction during meal-time, deep breathing exercises before or after meal-times)
- Initiation of family centered care
- Eating disorder specific recommendations:
  - Patients may not select their meals. This should be done in coordination with team and families.
  - Patient cannot go to the bathroom immediately after meal-times and should wait for 30 minutes after meals.
  - Patient should be monitored to ensure they are not engaging in body checking in mirrors.
  - Patient should receive blind weight checks, at the same time daily.

DISCUSSION

- Due to the rising number of children and adolescents presenting to the emergency room with eating disorder related symptoms, we present a call to action with the specific training and implementation of eating disorder related protocols throughout the length of stay of these patients based in AAP guidelines for treatment [3].
- During this time, psychiatry and psychology team members must partner to determine appropriate services and level of care upon discharge.
- Per AAP guidelines, the goal of the initial hospitalization is weight restoration which was achieved during each of the reviewed patient stays [3].
- The collaborative team was highly effective at adherence to medical evaluation and feedback AAP guidelines.
- Furthermore, the Psychiatric Consultation-Liaison team implemented Family-Based Treatment protocols, which are the gold standard in eating disorder treatment[4, 5].

Future Directions

The University of Maryland Medical Center is in a critical position to create an evidence-based pathway based on existing guidelines as established by the American Academy of Pediatrics to incorporate more specific psychiatric and behavioral management in the treatment of children and adolescents who present with concerns related to disordered eating behaviors. Future goals will be to refine this implementation process by including psychosocial evaluations and continuing to involve a variety of specialty care providers as well as train existing and new staff in this pathway in order to continue to provide coordinated care.

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