An Evidence Based Approach to Eating Disorders In Children

CONFLICT OF INTEREST STATEMENT

- I had no relevant financial relationships with commercial interests over the last 12 months.
- I will present a balanced view of diagnostic or therapeutic options.
- This presentation does not contain trade names or promotes specific companies or products.
- This presentation does not contain advertising.

Today's Presentation

- Introduction
- Presentation of eating disorders in children below 12 years of age through case studies
- Diagnostic dilemma
- One treatment approach
- Resources for family and providers
• DSM-IV criteria offer little value in the classification of the eating difficulties of children
• DSM-V criteria finally address the myth of ideal body weight for children.
• Yet the release of DSM-V was met with more controversy as the National Institute for Mental Health proposed to use a different classification system - Research Domain Criteria (RDoC) project
• Presentation of children with eating disorders clearly differs from that of adolescents and young adults
• All providers run the risk of missing or under-diagnosing children with eating disorders

Anorexia Nervosa in Children
Less Than 12 Years of Age

Case 1
Sheila, 7 year old female – history of fall and L forearm fracture
• Decreased rate of weight gain
• Became vegetarian 3 mo ago. No one else in household vegetarian
• Breakfast: low fat, specific-brand yogurt, OJ
• Lunch: booster juice
• Dinner: low fat yogurt
• No milk (hurts my stomach), no beans/no tofu (don’t like it), no meat products, fruits (bananas and watermelon only), almost no carbs, absolutely no desserts
• Unable to sit down when in the clinic lobby (I don’t know, tearful)

Case 1: Continued
• Saw her pediatrician and additional workup – including thyroid function, blood count, electrolytes, nutritional markers - all normal
• Brain MRI: Negative
• Then the patient complained she was “hearing voices” telling her not to eat. Parents worried about psychosis

Case 1: Growth Chart
Sheila age 11
Case 1: Treatment

• Diagnosed with childhood onset of anorexia nervosa
• Treatment round at 7 years old: Hospital, followed by Day Treatment Unit, and outpatient follow up → graduation back to her primary care provider
• Treatment round two at 9 years old: Went off ordered eating → weight loss and full relapse → admission to Day Treatment Unit and outpatient follow up → graduation back to her primary care provider (due to insurance concerns)

Case 1: Treatment (continued)

• Treatment round three at 11 years old: Started restricting at school → parents called our clinic → now in outpatient care
• Now 13 years old, has resumed her growth, achieved menarche and will start high school this year. Experienced few isolated restrictive eating episodes

Diagnostic Dilemma

Upon Sheila's presentation at the age of 7 years old
• Was not hyper-focused on calories and nutritional content
• Did not endorse a cognitive drive for thinness
• Did not complain about her body image
BUT .... During her third presentation at the age of 11 years old (and now at 13 years old)
• Complained of "too much fat" in her meals
• Thought about weight loss when she was dumping her lunches
• Worried about looking "too big" and "fat"

Eating Disorders and Children

• Weight loss OR lack of weight gain in children clearly NEEDS to be addressed – even with the current epidemic of obesity
• What is "ideal body weight"? – particularly in pre-pubertal children
• Current diagnostic criteria do not consider neuro-cognitive maturation in children
• The extremes: by the time of referral, most either had a very expensive work-up, or were asked to return in 3 months!
• Misdiagnosis or under-diagnosis can lead to severe sequelae – both temporary AND permanent
Case 2

Case 2

Carson, 10 year old male with a two year history of changes in eating habits

- Attributed to food allergies “sensitivity to gluten, dairy and peanuts”
- Now complains of “severe” abdominal pain and cannot eat “large” portions
- Baked elaborate desserts for his parents and siblings but refused to eat these
- Weight in May 2010: 63.6 pounds. January 2011: 63 pounds, 57 inches tall. Asked to “return in 3 months” for weight follow up
- Now paces around the house
- MUST supervise his mother cooking all of his meals. Accused her of poisoning his meals
- Home-schooled and belongs to small faith based community
- Family medical history: MGM with a completed suicide

Case 2: Growth Chart

Carson
Age: 10 years and 10 months

Case 2

- During initial evaluation in August 2011: Weight of 62 pounds (!), 57 inches tall, rest of his vital signs were within normal limits
- Experienced weight loss AND did not grow taller over the last 8 months

Case 2: Treatment

- Carson was admitted to the hospital for medical stabilization, followed by admission to the Day Treatment Unit and outpatient follow up
- His bone age series showed that he is at HIGH risk for permanent growth stunting due to his age
- Now being followed by a local pediatrician who stays in touch with Kartini MD via routine text message for co-management
Diagnostic Dilemma

- Carson is a boy and his physician did not believe that "boys" as young as Carson can be affected
- Because of Carson’s family medical history, he was referred to a local (and adult) psychiatrist
- Carson’s initial symptoms were mostly “non-specific”
- Carson never complained of any body image distortion – yet upon further observation by our staff, he was “body checking”
- The family self-referred – they found out about our services on their own with the help of a family friend who knew about the Kartini Clinic
- PCP was surprised to hear about Carson’s diagnosis and treatment!

Eating Disorders and Young Boys

- Often under-diagnosed
- Many present with over-exercising
- May or may not complain of body image distortion e.g. wanted to build muscles, improve sports’ performance
- By the time of the referral: usually quite ill, bradycardic, malnourished, often osteopenic or osteoporotic

What About EDNOS?

- The dilemma about “EDNOS” versus subclinical or partial anorexia
- Need to consider other diagnoses – including tumors, Addison’s, anxiety, Munchausen by proxy among others

Case 3

Holly, 10 year old female underwent oral surgery procedure 5 weeks ago; experienced post-anesthesia emesis
- Now cannot swallow liquid or solid
- Actually “drooling” (can’t swallow own saliva)
- Extensive work-up including ER visits, inpatient hospitalizations, numerous consultations with pediatric subspecialists
- ALL work was negative so far
- STILL cannot swallow saliva, fluids or solids
- On presentation weight 63.4 pounds (5 weeks ago 73 pounds)
- Denies any cognitive drive to lose weight
- Wants fried chicken!
Case 3: Growth Chart
Holly age 10

Case 3: Treatment

Food phobia, successfully treated using unique protocol in inpatient setting and a short stay in our Day Treatment Unit
Returned to South Carolina after treatment

Diagnostic Dilemma

- Holly wants to eat but cannot
- Holly has no cognitive drive for thinness
- She has no previous history of food refusal
- There is a strong family history of anxiety disorder

Food Phobia

- Sudden onset usually following a choking episode or after an infectious episode (PANDAS) involving vomiting or nausea
- Fear to swallow and eat → worried that it will lead to choking or emesis. May not even swallow saliva/oral secretions
- Rapid weight loss
- History of other anxiety disorder in the patient and/or family
Other eating disorders in children

- Selective eating
- Avoidant/Restrictive Food Intake Disorder (ARFID) – replacing the previous diagnosis of Feeding Disorders of Infancy and Childhood; others used to call it Food Avoidance Emotional Disorder (FAED) by Lask and Bryant-Waugh

Evidence-based

Multidisciplinary: physicians and therapists – family, milieu, recreational, individual and art therapists

Family-based: parents are an integral part of the team

Approach to Treatment of Eating Disorders in Children

Eating Disorder Specific Levels of Care

- Inpatient Residential Programs
- Inpatient Medical
- Day Treatment Unit (partial hospitalization)
- Outpatient Program

Inpatient Hospitalization

- Using the American Academy of Pediatrics for inpatient hospitalization
- At a children’s hospital (not a psychiatric ward!)
- Daily physician visits
- Initiation of family therapy
- Parents support group
- Focus is medical stabilization
### Day Treatment Unit

- Also known as partial hospitalization
- Family-based approach
- Five days a week
- Structured eating
- Emphasis on mental health
- Age appropriate
- Includes group therapy, individual therapy, milieu therapy, art therapy, school time, and yoga among others

### Outpatient Care

- Medical visits
- Ongoing family therapy
- Group therapy
- Individual therapy

### Next steps when suspecting a child has an eating disorder?

- Creating a “team” – medical + mental health providers + parents
- Educating providers
- Educating parents

### Medical Visits

- Suggest meeting with parents 1:1 to discuss their initial
- Consider blinded weight
- Consider orthostatic vital signs – supine and standing
- Additional tips re: how to weigh a child with an eating disorder, e.g Dr. O’Toole’s blog
- Suggest WEEKLY appointments (nursing and/or medical) to obtain multiple data points re: the patient’s vital signs and more through food and behavioral history
Potential complications

- Malnutrition – "fuel mismatch" and potential for refeeding syndrome
- Growth stunting
- Cardiac sequelae – bradycardia, syncope, asystole, prolonged QTc
- Amenorrhea/oligomenorrhea
- Low testosterone
- Bone health
- Delayed myelination
- Metabolic sequelae – hypoglycemia (with or without hyperinsulinemia), hypoleptinemia, low zinc, etc
- Depression
- Anxiety
- And list continues – including the indirect cost and impact on the family

The Role of Parents

"Parents don’t cause eating disorders
and children don’t choose to have them”

- Parents are part of the treatment team as they are the child’s primary care givers
- Parents are in charge of their children’s meal plan – meal preparation and supervision
- Parents participate in family therapy and are included in decision making
- Parents are educated about the nature of their children’s illness

Educating Parents

- While in treatment through family therapy and parent support group
- Online resources: FEAST (feast-ed.org)
- Books
- Educational DVDs
  - e.g. Spotting the Tiger, Part One (5:16m)*
  - No more secrets (16:57m)*
  - *also on http://www.youtube.com/kartiniclinic

Additional Resources

- National Eating Disorders Association (NEDA)
  http://www.nationaleatingdisorders.org/
- Academy for Eating Disorders
  http://www.aedweb.org/
- FEAST – Families Empowered and Supporting Treatment of Eating Disorders
  http://www.feast-ed.org/
- Kartini Clinic
  www.kartiniclinic.com
Bibliography


O'Toole, Julie. Give Food a Chance (2010)

