

## PATIENT INFO

Age/Sex: 20 / Female

**Background:** 20-year-old college junior who is on the cross country team; referred by a local orthopedic surgeon who became suspicious that Suzanne might have an eating disorder after she developed a stress fracture while running; the athletic department is aware of the referral and has encouraged her to see you; her coach has noticed that she has been losing weight in the last few months; her family lives several hours away from her university; she is attending college on an athletic scholarship.

**Patient Visit:**

- Suzanne arrives for the appointment looking very apprehensive and is very annoyed with her coach for insisting that she see you
- She is 5' 4" inches tall and weighs 95 lbs.
- She runs 10 miles or more every day and plans her daily schedule around her runs
- Her diet consists of cereal and salad
- She tells you that she thinks she is fat, has recently lost 10 pounds and wants to lose 5 more pounds
- She has not had a menstrual period in 3 months
- She denies any history of purging, but admits to occasional drinking binges, and reports increased difficulty focusing on her school work due to the "demands of her sport"
- She expresses concern that she might lose her scholarship if she is not allowed to continue running

-----

## BEST PRACTICES

List three best practices agreed to by the group in your chart review session:

1. Gather more history about physical, psychological symptoms as well as athletic and academic performance—look for severity, chronicity, comorbidities such as depression, ocp, substance abuse, suicidal thinking (high risk); screen labs.
2. Create alliance with patient using the athletic interest and support of coach to strengthen alliance, but also focus on overall health.
3. Treat eating disorder and any comorbid disorder with combination of psychotherapy, nutritional counseling, medication—has limited role.
4. Earlier intervention more successful. Evaluate level of care needed—start with outpatient.



2ND ANNUAL  
**CHAIRS**  
IN PSYCHIATRY **SUMMIT**  
The Master Class for Psychiatric Professional Development



# An Athlete in Danger *Chart Review*

Merry Noel Miller, MD  
East Tennessee State  
University



# Merry Noel Miller, MD

## *Disclosures*

- ***Research/Grants:*** None
- ***Speakers Bureau:*** None
- ***Consultant:*** None
- ***Stockholder:*** None
- ***Other Financial Interest:*** None
- ***Advisory Board:*** None



## Learning Objective

Recognize eating disorders in your athlete patients and develop an appropriate treatment plan



# Patient Information

- Suzanne
- 20-year-old college junior who is on the cross country team
- Referred by a local orthopedic surgeon who became suspicious that Suzanne might have an eating disorder after she developed a stress fracture while running
  - The athletic department is aware of the referral and has encouraged her to see you
- Her coach has noticed that she has been losing weight in the last few months
- Her family lives several hours away from her university
- She is attending college on an athletic scholarship

# Patient Visit



- Suzanne arrives for the appointment looking very apprehensive and is very annoyed with her coach for insisting that she see you
- She is 5' 4" tall and weighs 95 lbs.
- She runs 10 miles or more every day and plans her daily schedule around her runs
- Her diet consists of cereal and salad
- She tells you that she thinks she is fat, has recently lost 10 pounds and wants to lose 5 more pounds
- She has not had a menstrual period in 3 months
- She denies any history of purging, but admits to occasional drinking binges, and reports increased difficulty focusing on her school work due to the "demands of her sport"
- She expresses concern that she might lose her scholarship if she is not allowed to continue running



# Questions

- What diagnoses would you suspect?
- What further questions would you ask?
- What medical complications would you be concerned about?
- What role might athletics play in her presentation?
- How could you treat Suzanne?



# Diagnostic Criteria for Anorexia Nervosa

- A. Refusal to maintain body weight at or above a minimally normal weight for age and height (e.g., weight loss leading to body weight less than 85 percent of that expected; or failure to make expected weight gain during period of growth, leading to body weight less than 85 percent of that expected)
- B. Intense fear of gaining weight or becoming overweight, even though pt is underweight
- C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or denial of the seriousness of the current low body weight
- D. Amenorrhea in postmenarchal females (i.e., the absence of at least three consecutive menstrual cycles)

## Specify type:

**Restricting type:** during the current episode, patient has not regularly engaged in binge eating or purging

**Binge eating/purging type:** during the current episode, the patient has regularly engaged in binge eating or purging

*Diagnostic and Statistical Manual of Mental Disorders. 4th ed, Washington, D.C.: American Psychiatric Association, 2000:589.*

# Laboratory Assessments for Eating Disordered Patients

- All ED patients:
  - Serum electrolytes (includes potassium)
  - Blood Urea Nitrogen (BUN), Creatinine
  - Thyroid Stimulating Hormone (TSH), free T4, T3
  - CBC with differential, erythrocyte sedimentation rate (ESR)
  - Aspartate aminotransferase, alanine aminotransferase, alkaline phosphatase
  - Urinalysis
- Additional labs for anorexia:
  - EKG
  - Serum calcium, magnesium, phosphorus, ferritin
- If amenorrheic > 6 months:
  - Dual-energy X-ray absorptiometry
  - Serum estradiol (females) or serum testosterone (males)

APA practice guidelines:

[http://www.psych.org/psych\\_pract/treatg/pg/prac\\_guide.cfm](http://www.psych.org/psych_pract/treatg/pg/prac_guide.cfm).

# Medical Complications Due to Starvation



- Loss of fat, muscle mass, reduced thyroid metabolism (low T3), cold intolerance
- Loss of cardiac muscle, small heart, arrhythmias, bradycardia, ventricular tachycardia, sudden death
- Osteoporosis
- Delayed gastric emptying, bloating, constipation, abdominal pain
- Dehydration (elevated BUN)
- Elevated cholesterol; high liver function tests, anemia, leukocytopenia, thrombocytopenia
- Lanugo, edema
- Abnormal taste sensations
- Amenorrhea, low levels LH & FSH



# Therapy Goals

- Shift goals from weight to energy and self-esteem
- Shift thoughts of food as enemy to essential for health
- Move from perfectionism to flexibility
- Exercise for fun vs. calories burned
- Encourage identification & expression of feelings
- Listen to body's hunger/fullness cues
- Confront cognitive distortions and replace with healthier thinking
- Promote independence-seeking

# Conclusions



- The first step in treatment of eating disorders is to address denial, build alliance
- Monitor weight and medical complications of starvation and purging; hospitalize when needed
- Therapy is mainstay of treatment
- Medication of limited benefit for AN, more for BN & BED
- Atypical antipsychotics have potential role for AN, need more study
- Multidisciplinary team ideal approach, including PCP, nutritionist, therapist



# neuroscience | CME

an educational series offered by  
CME Outfitters, LLC

This CME/CE activity is  
co-sponsored by

**UT SOUTHWESTERN**  
MEDICAL CENTER

CME  
Outfitters 

## **An Athlete in Danger**

Merry Noel Miller, MD

APA practice guidelines. Available at: [www.psych.org/psych\\_pract/treatg/pg/prac\\_guide.cfm](http://www.psych.org/psych_pract/treatg/pg/prac_guide.cfm).

*Diagnostic and Statistical Manual of Mental Disorders*. 4th ed, Washington, D.C.: American Psychiatric Association, 2000:589.