

Case Studies

October 2003: Adolescent Obesity

Case: Melinda is a 16 year old African American female who presents with complaints of fatigue, difficulty losing weight, difficulty concentrating, and no motivation. She denies polyuria, polydipsia, polyphagia, and blurred vision.

She notes a marked decrease in her energy level, particularly in the afternoons. Parents indicate that the fatigue has begun interfering with grades. Patient is tearful and parents state that patient has been depressed. Mother further states that Melinda has begun to exhibit low self-esteem and poor self-image. Her mother believes that Melinda's weight problem have escalated to the point in which Melinda is no longer interested in taking care of herself. Her self-care has become so poor that daily hygiene like brushing her hair, brushing her teeth and showering has become a chore.

Her mother states that her daughter has gained an enormous amount of weight over the last year and she is presently at the highest weight she has ever been. Patient indicates that she has "always" had a weight. She does not follow any specific diet and reports that it is difficult for her to avoid eating what her friends eat including products high in sugar and carbohydrates like doughnuts, cake and chips. Melinda eats at fast food restaurants on weekends with her friends and usually orders a couple of cheeseburgers with fries. She reports drinking about 4-6 sodas per day and consumes very little dairy products. Her main meals consist of starchy foods such as pasta with cream sauce, stuffed baked potatoes, and home made bread. The majority of the meat and poultry she consumes is dipped in egg, flour and then fried. Melinda's mother does most of the cooking and enjoys preparing big meals with dessert on a daily basis. Every Sunday after church all the cousins, aunts, and grandparents come to Melinda's for dinner. The family views foods as a form of socialization and the majority of the family's get-togethers involve large quantities of food. Melinda does not eat breakfast and consumes the majority of her calories during the evening. She reports eating late at night in her room during which time she generally consumes things like ice cream, chips, or cookies.

Melinda lives in a ranch style home in an urban neighborhood. She lives with both biological parents, one brother age 8 and one sister age 10. All of who are overweight/obese. Her father works for the postal service and her mother is a homemaker. This is Melinda first year in Junior High and she reports that it has been a difficult transition. Prior to this year she had As and Bs but her grades have dropped over the last 6 months. Her favorite subjects are math and science. She does not participate in any extra curriculum activities.

Patient denies being physical active other than during PE at school 1x weekly. Melinda says PE class is very embarrassing because kids laugh at how SOB she is with exertion. Overall, Melinda says her family is inactive. At home Melinda watches TV or listens to music. Socially, Melinda states she has never "fit in". She explains that she has always had to work hard at making friends and never felt good enough to be friends with girls who were thinner and more popular. She indicates that she does have a few friends all of which are overweight. She denies an interest in boys and states that "boys just laugh at me". Mother states that over the last 6 months or so Melinda has become socially withdrawn from her normal circle of friends and has begun to spend a great deal of time alone in her room.

Medications: None

Allergies: No Known Allergies.

Past Medical History: Past medical history is remarkable for obesity. See growth chart.

Family History: Type 2 diabetes: paternal grandmother; Hypertension: mother and father. Overweight or obese: all of the immediate family except for 2 cousins

Laboratory Tests: On laboratory testing, chemistries, BUN, creatinine, and liver function tests are normal. Thyroid function tests and urine microalbumin are also normal.

Physical Exam: Height is 5'3"; Weight is 189lbs with a BMI of 34.5. Her blood pressure is 160/88 mmHg. The remainder of the physical exam including thyroid is unremarkable.

For Discussion:

All students:

1. Discuss the leading contributing factors for childhood obesity.
2. Does this patient exhibit signs of depression? Provide rationale for your response.
3. What type of environmental factors should be considered when addressing Melinda's weight problem?
4. At which level should interventions be aimed: individual and/or family? Provide rationale for your choice/s.
5. Is there a genetic predisposition for Melinda's weight problem? Provide rationale for response.
6. How does family structure and dynamics impact individual development of obesity
7. Discuss the link between obesity and cavities in children?
8. What types of weight loss products (OTC and prescriptions) if any, would you suggest for an adolescent or a child? Provide rationale.
9. What types of pharmaceutical therapies would you suggest for Melinda regarding her depression? Could this compound her weight problem? If so, explain.
10. What behavior and psychological modalities are appropriate to consider using with obese children or adolescents?
11. What developmental stage is Melinda in and how could this impact her weight problem?
12. What types of behavior did Melinda exhibit which may have compounded her weight problem?