Obesity Treatment in Special Populations

- Smokers
  - All smokers, regardless of weight, should quit smoking.
  - Implement weight gain prevention, treatment efforts as necessary.
- Older adults
  - Evaluate risk-to-benefit ratio.
- Diverse patient populations
  - Tailor treatments to patient needs.

Obesity and Sleep Apnea

The major correlates of sleep apnea:

- Prevalence is higher in males than in females.
- Obese men and women have higher prevalence.
- May be more prevalence among special populations with higher prevalence of obesity.

The major consequences of untreated sleep apnea:

- Severe arterial hypoxemia.
- Increased risk of cardiac arrhythmia.
- Increased risk of high blood pressure.
- Possible increased risk of stroke.

Obesity and Sleep Apnea

- Treatment of obesity ameliorates obstructive sleep apnea
  - Medical treatment.
  - Surgical treatment.

- Benefits of treatment
  - A 10% weight reduction is associated with a 50% reduction in severity of sleep apnea.
  - Reduction of specific cardiovascular risk factors.

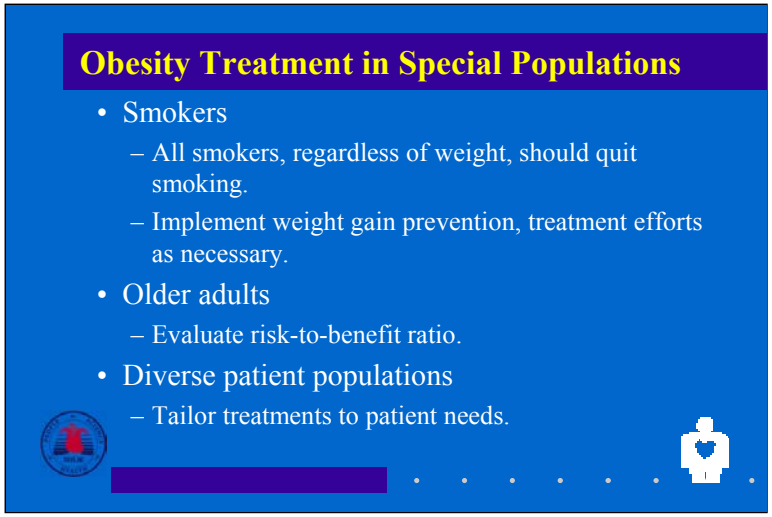
CASE STUDIES

A 45-year-old man comes in for his annual physical.

- Height 5’10”, weight 210 lb, nonsmoker, no history of CAD, DM, or dyslipidemia.
- On questioning, he is unconcerned about his weight, which he attributes to “too much food and too little exercise.”
- His wife, however, has been nagging him to lose weight.
- On physical exam, he is moderately obese, BP 140/99, pulse 78 and regular, waist circumference 42 inches; no other abnormalities detected.
- Clinical assessment:
  - What further evaluation would you perform?
  - How would you address his obesity?

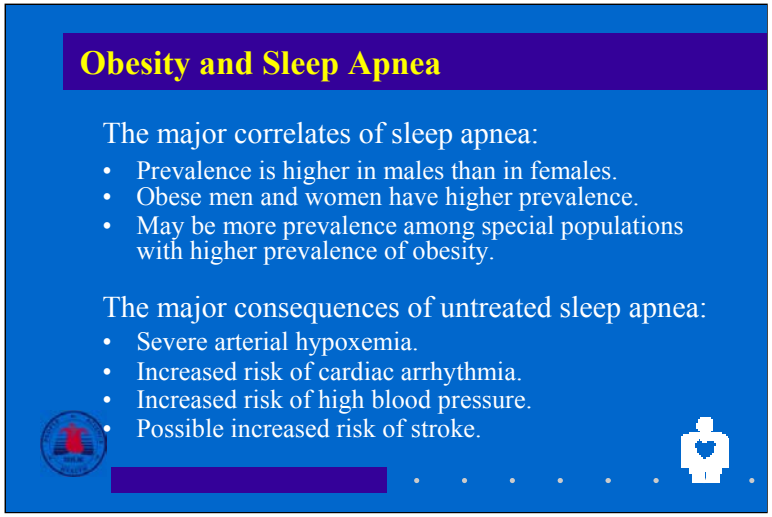
A 32-year-old woman comes to your office requesting "diet pills" because "I'm too fat."

- Height 5'5", weight 149 lb.
- Difficulty losing weight after her second pregnancy 18 months ago; about 8 pounds heavier than her prepregnancy weight.
- Always overweight—lost and regained 10 to 15 lb numerous times.
- Used to go to a gym to exercise 2 or 3 days a week—now no time because of her young children.
- On physical exam, no abnormalities detected; waist circumference 30 inches, BP 118/72, pulse 84 and regular, lipids and glucose within normal limits.
- Clinical assessment:
  - What is her BMI?
  - Would you prescribe weight loss medications?
  - What would you advise her regarding weight management?



The guidelines also address weight loss issues for special populations, such as those shown here:

- *Smokers*. Smoking and obesity together increase cardiovascular risk. Fear of weight gain upon smoking cessation is an obstacle for many patients who smoke. All smokers, regardless of their weight status, should quit smoking. Prevention of weight gain should be encouraged, and if weight gain does occur, it should be treated; however, the primary emphasis should be on abstinence from smoking.
- *Older Adults*. Age alone should not preclude treatment for obesity in older women. There is little evidence to indicate that obesity treatment should be withheld on the basis of age alone up to 80 years of age; however, consideration must be given to the special nutritional needs of these patients.
- *Diverse Patient Populations*. Large individual variation exists within any social or cultural group. Thus, there is no "cookbook" or standardized set of rules recommended to optimize weight reduction with a given type of patient. Based on an analysis of cultural appropriateness in obesity treatment programs, it seems that it is important to tailor treatment to the patient's characteristics and perspectives when designing and delivering weight loss programs.



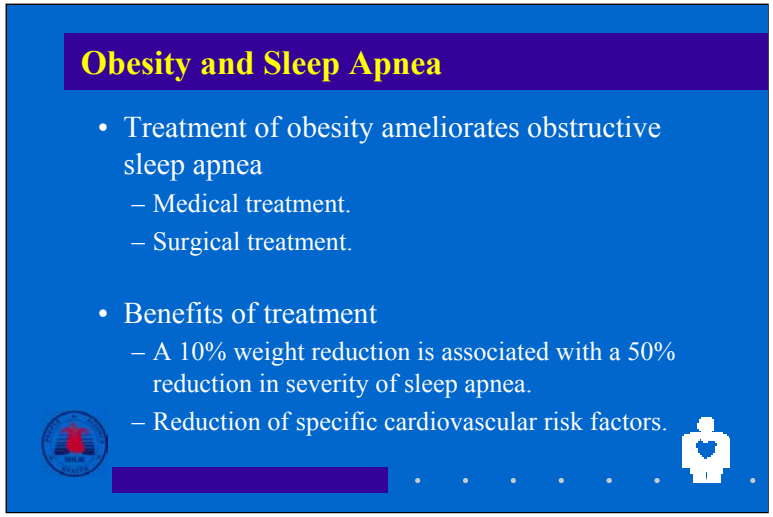
The next two slides show the relationship of obesity and sleep apnea. Sleep apnea, as well as other sleep disorders, have become the focus of NHLBI educational efforts. The National Center for Sleep Disorders, in conjunction with NHLBI, has begun research and educational efforts to understand the role of sleep disorders and cardiovascular risks, including morbidity and mortality. Obesity and overweight contribute significantly to the consequences of sleep apnea.

The major correlates of sleep apnea:

- Prevalence is higher in males than in females. However, some studies suggest that the prevalence in females increases after menopause.
- Obese men and women have higher prevalence. In general, women have to be significantly more obese than men for the clinical syndrome to be apparent.
- Higher prevalence among special populations with higher prevalence of obesity.

The major consequences of untreated sleep apnea:

- Severe arterial hypoxemia.
- Increased risk of cardiac arrhythmia.
- Increased risk of pulmonary and systemic high blood pressure.
- Increased risk of stroke.



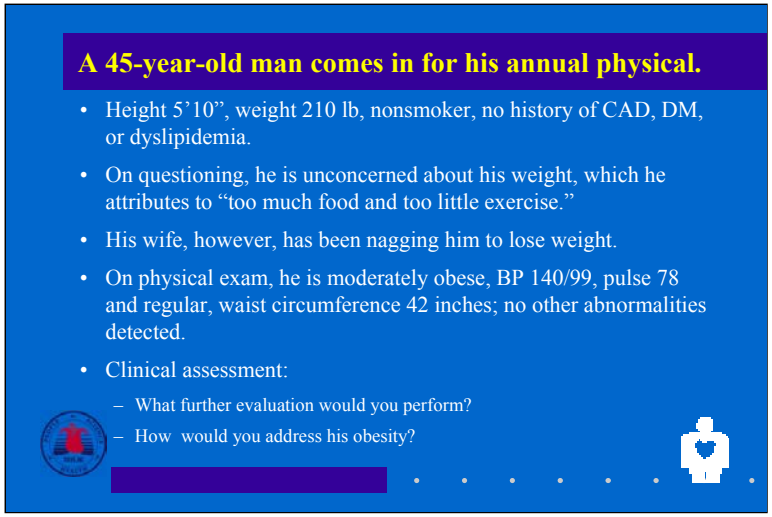
The primary goal for treatment of individuals with sleep apnea is to reduce the severity of the respiratory events that are associated with oxyhemoglobin desaturation and arousal from sleep. The evidence that treatment of obesity ameliorates obstructive sleep apnea is reasonably well established.

Both medical and surgical approaches to weight loss have been associated with a consistent but variable reduction in the number of respiratory events, as well as improvements in oxygenation.

Benefits of treatment

- As little as a 10% weight reduction is associated with a 50% reduction in severity of sleep apnea.
- Reduction of specific cardiovascular risk factors.… weight reduction has been associated with the comparable reduction in the severity of sleep apnea as well as improved renal function and hypertension.

The following two case studies attempt to pull together some of the recommendations from the guidelines and place them into very real situations with two very different patients.



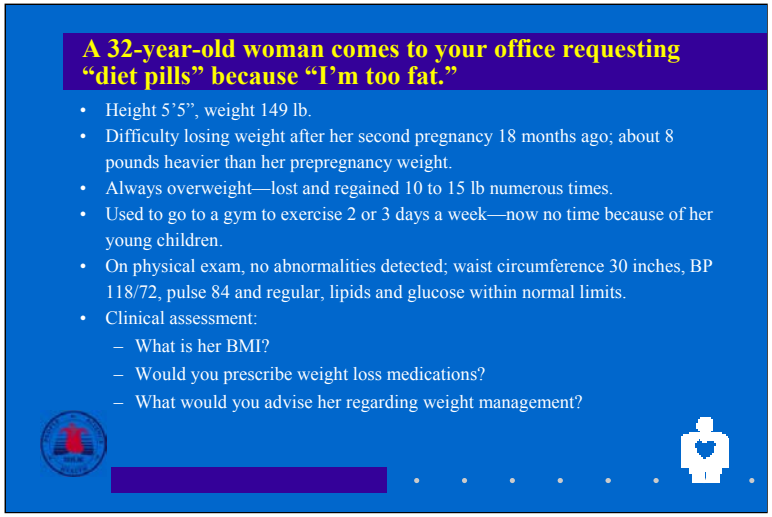
A 45-year-old man comes in for his annual physical.

- He is 5'10", and weighs 210 lbs; he is a nonsmoker and has no history of coronary artery disease, diabetes mellitus, or dyslipidemia
- On questioning, he is unconcerned about his weight, which he attributes to "too much food and too little exercise."
- His wife, however, has been nagging him to lose weight.
- On exam, he is moderately obese, BP 140/99, pulse 78 and regular, waist circumference 42 inches; no other abnormalities detected.

Clinical assessment:

What further evaluation would you perform?

How would you address his obesity?



The second case study is that of a 32-year-old woman who comes to your office requesting "diet pills" because "I'm too fat."

- The woman is 5'5" tall and weighs 149 lbs.
- She claims that it has been difficult for her to lose weight after her second pregnancy 18 months ago; she remains about 8 pounds heavier than her prepregnancy weight.
- In terms of her history, she has always been overweight—lost and regained 10 to 15 lbs numerous times.
- Used to go to a gym to exercise 2 or 3 days a week—now no time because of her young children.
- On physical exam, no abnormalities detected; waist circumference 30 inches, BP is 118/72, pulse is 84 and regular, lipids and glucose are within normal limits.

Clinical assessment:

What is her BMI?

Would you prescribe weight loss medications?

What would you advise her regarding weight management?