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Hypertension Case Study

MSN

C.S. is a 40-year-old male who attends a community health screening. He states that he has not seen a health care provider in a “really long time.” He is a truck driver who eats mainly fast food while on the road. He smokes a pack of cigarettes a day “just for something to do during the long hours of driving and to keep me calm.” C.S. is 5 ft., 9 in tall and weighs 230 lb. His BP is 182/104, heart rate 90, respirations 24, and temperature 97.0°F.

1. What risks factors for hypertension does C.S. have?

- Unhealthy diet – excess dietary sodium
- Sedentary lifestyle.
- Tobacco use
- Wellness visits are lacked.
- Gender and age – males are higher risks when they are younger.
- Stress - “smokes to keep him calm”

2. What clinical manifestations of hypertension would you assess for in C.S.?

- Fatigue
- Dizziness
- Palpations
- Angina
- Dyspnea

3. What complications will you assess C.S. for?

- Coronary Artery Disease
- Left Ventricular Hypertrophy
- Heart Failure
- Cerebrovascular Disease
- Peripheral Vascular Disease
- Retinal Damage

C.S. is referred to his health care provider to follow up on his high blood pressure screening.

4. What diagnostic studies might you expect the health care provider to order for C.S.?

- Measurement of BP
- Urinalysis
- BUN and serum creatinine
- Creatinine clearance
- Serum electrolytes, glucose
- Serum lipid profile
- Uric acid levels
- ECG
- Echocardiogram
- Ambulatory blood pressure monitoring (ABPM)

C.S.'s BP is monitored for several visits and remains elevated. His serum cholesterol, BUN, and creatinine levels are elevated. His creatinine clearance (glomerular filtration rate) is below normal, demonstrating renal insufficiency.

5. What type of lifestyle modifications would you recommend for C.S. to control his BP?

- Weight loss
- Nutrition and diet, dietary sodium reduction
- Increase physical activity
- Avoidance of tobacco products
- Drug therapy