

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 risk factors for hypertension does C.S. have?

- Man under 64
- Tobacco use
- Obesity – BMI of 34
- High sodium intake – fast food
- Sedentary lifestyle – sitting for long periods of time driving
- High blood pressure – 182/104 Stage 2 classification

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

- Palpitations
- Dyspnea
- Angina
- Headaches
- Nose bleeds
- Fatigue
- Dizziness

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

- Coronary Artery Disease
- Left Ventricular Hypertrophy
- Cerebrovascular Disease
- Peripheral Vascular Disease
- Renal Disease

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
- ECG
- 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?
- Exercise frequently and try to lose weight – 150 minutes a week of moderate activity
 - Smoking cessation
 - Sodium reduction – encourage no more than 1500mg of sodium per day
 - Adapt a new diet such as the DASH eating plan