

## 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?

Some risk factors would include mainly eating fast food while on the road, smoking a pack of cigarettes a day, limiting exercise/movement because he is a truck driver, and his BMI puts him at overweight.

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

Clinical manifestations would include: fatigue, dizziness, palpitations, angina, and dyspnea. He would also present with high blood pressure.

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

Complications we would assess for: Coronary Artery Disease, Left Ventricular Hypertrophy, Heart Failure, Cerebrovascular Disease, Peripheral Vascular Disease, Nephrosclerosis, and 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.?

Some diagnostic testing would include urinalysis, BUN and serum creatinine, serum electrolytes and glucose, ECG, and Echocardiogram. He will need to frequently monitor his blood pressure as well.

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?

Lifestyle modifications would include smoking cessation, recommending resources that would help him find a better way to cope with “just for something to do” while driving long hours. Lowering sodium with better nutrition options, such as the DASH diet, plant based, or even Mediterranean diet. Keeping healthy snacks on hand. Encourage at least 150 minutes of exercise a week, encourage to make stops when driving if possible and even just 15-30 minutes of walking would help.

