

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?

C.S has a few identifiable risk factors such as: high sodium intake (eats mostly fast food), tobacco use (a pack of cigarettes a day), overweight (230 pounds), and he has a very sedentary lifestyle (truck driving profession).

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

Hypertension is often not identified right away because of patients being asymptomatic. For severe hypertension we would see clinical manifestations such as fatigue, dizziness, palpitations, angina, and dyspnea.

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

A few complications I would assess C.S for are: Coronary Artery Disease, Left Ventricular Hypertrophy, Heart Failure, Cerebrovascular Disease, Peripheral Vascular Disease, Nephrosclerosis, and Renal 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.?

The health care provider might order: measurements of BP, Urinalysis, BUN and Serum Creatinine, Creatinine Clearance, Serum Electrolytes Glucose, Serum Lipid Profile, Uric Acid Levels, ECG, and Echocardiogram.

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?

I would encourage C.S to increase his physical activity to 150 minutes a week or 30 minutes a day of moderate-vigorous exercise. I would also educate on the importance of a healthier diet, that consists of less than 2300 milligrams of Sodium daily. I could also recommend the DASH diet which incorporates more fruits, vegetables, fat free/low fat milk, whole grains, fish, poultry, etc. Finally, I would educate on

the importance of limiting the use of cigarettes to help with less vasoconstriction of the blood vessels. I would advise the patient to see health care provider to get HTN under control, once stable to meet with them every 3-6 months depending on physician recommendation.