

Hypertension Case Study
MSN
Lindsey Steele

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?

- He smokes a pack a day
- His diet consists of mainly fast food while on the road
- He is 40 years old
- He is 5ft., 9in tall and weighs 230lbs

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

I would assess for fatigue, dizziness, palpitations, angina, and dyspnea.

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

I would assess for 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 studies are BP measurement, urinalysis, BUN and serum creatinine, creatinine clearance, serum electrolytes and 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 recommend weight loss, nutrition, and diet, like plant-based and Mediterranean diets or a DASH eating plan, and a dietary sodium reduction. I would recommend doing physical activity and avoid tobacco products.