

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?

- Tobacco use – smokes just for something to do
- Excess dietary sodium – from the fast food consumption
- Sedentary lifestyle – is always sitting down while driving
- Stress – driving with others on the road, possible being tired
- Age – younger men are at higher risk for hypertension

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

- Fatigue
- Dizziness
- Palpitations
- Angina
- Dyspnea

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

- Coronary artery disease (CAD)
- Left ventricular hypertrophy
- Heart failure
- Peripheral vascular disease
- Nephrosclerosis
- 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.?

- Basic labs
- Vital signs; especially BP and HR
- Urinalysis, BUN and serum creatine, creatinine clearance – to show renal involvement and kidney function
- Serum electrolytes, glucose
- Uric acid levels
- ECG

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 changes
 - Weight loss – I would recommend C.S. to, if possible, walk on breaks that he has and make sure he is getting at least 30 minutes of exercise a day.
 - Low sodium diet – I would recommend C.S. to consume more vegetables, fruit, whole grains, fish, poultry, beans.
 - Sedentary lifestyle – C.S. can try to be more active like walking on breaks instead of smoking
 - Tobacco use – I would see how C.S. feels about cessation of smoking
- Drug therapy – possibly be put on an anti-hypertensive by HCP if they believe its necessary