

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? He is a male, smoker, overweight, leads a sedentary lifestyle (truck driver-sits for long hours), and eats excess dietary sodium because he mainly eats fast food.
2. What clinical manifestations of hypertension would you assess for in C.S.? Clinical manifestations I would assess for in C.S. would include fatigue, dizziness, palpitations, dyspnea, and angina.
3. What complications will you assess C.S. for? I 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.? I would expect the healthcare provider to order serum electrolytes, glucose, serum lipid profile, uric acid levels, ECG, echocardiogram, urinalysis, BUN, creatinine, measurement of BP including ambulatory blood pressure monitoring.

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 that I would recommend include weight loss, nutrition, and diet changes, (Mediterranean diet, Dash diet, fruits, vegetables, fat free or low-fat milk, whole grains, fish, poultry, beans, seeds, nuts, and sodium reduction) reduce stress, smoking cessation, and increase physical activity. Additionally, I would also encourage and educate on the benefits of routine health care along with an addition to medication to aide in improvement of overall health, and avoidance of NSAIDS.