

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 risk factors for hypertension does C.S. have?

Sedentary lifestyle, obesity, sodium intake (fast food), anxiety, no consistency with healthcare (hasn't seen PCP in "really long time"), smoker, male, age hypertension

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

Blood pressure, headaches, visual changes, ext. edema, fatigue (↓ activity tolerance), dizziness, confusion, blood in urine (hematuria), N/V, diaphoretic, chest pain, palpitations, SOB (dyspnea), S/S of HF

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

CHF, diabetes, retinopathy (poor vision), hematuria, cardiovascular disease

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.?

Measurement of BP, urinalysis, BUN/creatinine, creatinine clearance, serum electrolytes/glycose, serum lipid profile, uric acid levels, ECG, echocardiogram, chest xray, blood glucose

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?

weight loss, change nutrition/diet; decrease sodium intake, incorporate an exercise plan, smoking cessation (avoidance of tobacco)