

## 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?

- Reoccurring fast food eater
- Not seen a Dr. in awhile
- Smokes cigarettes (Copes with stress)
- Overweight
- Potentially stressed?
- Sedentary lifestyle

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

- Fatigue
- Dizziness
- Heart Palpitations
- SOB
- Chest pains/angina

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

**I would assess C.S. for peripheral vascular disease, retinal damage, nephrosclerosis, coronary artery disease, left ventricular hypertrophy, cerebrovascular disease, and heart failure.**

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 health care provider to order a urinalysis along with BUN and creatine levels to look at renal involvement, creatinine clearance, serum lipids + electrolytes (potassium), uric acid levels, and an 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?

**I would suggest that C.S. should start a dash food plan or follow a plant-based or Mediterranean diet. This would include less red meat, less salt, avoiding canned foods or frozen dinners. These new diets would include legumes, fruits, veggies, lean meat, and whole grains. I would also advise him to get at least 150 minutes of exercise in a week, with 2 days including resistance exercises to maintain muscle mass. This would hopefully encourage healthy weight loss which would decrease his risk of continuing HTN.**