

Hypertension Cases

Case 1

A 74 year old African-American man with a 25 year history of poorly controlled hypertension presents to clinic with a BP of 170/88 and a regular pulse of 58 beats/minute. He also has had a long history of asthma which flares up occasionally. He currently takes no medication but does follow a low sodium diet. He has no chest pain or dyspnea. There is an S4 at the apex. His jugular venous pressure is normal, and there is no ankle edema. His EKG is shown.

1. What else do you want to know?
2. what does the EKG show?
3. What is the significance of the comorbid conditions if you are going to treat the hypertension anyway?
4. Which class of antihypertensive medication would probably be contraindicated in this patient?
5. What class(es) of blood pressure medication would be a reasonable choice and why?
6. Does it sound like this patient has diastolic dysfunction? Why or why not?

Case 2

A 69 year old man with longstanding hypertension presents to the ER in great distress complaining of severe "tearing" chest pain which began 30 minutes ago. His BP is 170/110 in the Rt. Brachial artery, 130/80 in the left. P II0/min. A soft diastolic murmur is noted. His CXR is shown.

1. What do you think is happening here?
2. How would you confirm your diagnosis?
3. What would you do next?

Case 3.

A 22 y.o. white female is found to have a blood pressure of 190/110 which is similar on repeat over the next 3 months. Serum creatinine 1.4 mg/dl. Potassium 2.8 mEq/dl. Serum bicarbonate 32 meq/dl.

1. What is the differential diagnosis?
2. What is the most likely cause of the hypertension?
3. What is the significance of the serum potassium?
4. What is the significance of the serum bicarbonate?
5. What should be done?

Case 4

A 24 y.o. white male medical student presents with a blood pressure of 160/90.

1. What else do you want to know?
2. Would you start therapy?

Case 5

A 25 year old complains of headaches, blurred vision. On examination BP 250/160 there is papilledema, rales on lung exam and on cardiac exam, a LV heave and a loud S4 gallup. Serum creatinine is 10.0 mg/dl; potassium 4.0 mEq/L.

1. What is the terminology used for this presentation?
2. Why does the patient have blurred vision?
3. Why does the patient have rales?
4. What is the significance of the S4 gallup?
5. What is the significance of the S3 gallup?
6. Why is the creatinine elevated?
7. What is the therapy?
8. What would be found on renal biopsy?
9. What is the course of the disease?