

## CVS-CASE BASED LEARNING

35 years old male visited a clinic for executive checkup. He admitted having occasional / episodic headache and chest pain on exertion. He has family history of Hypertension and is engaged in a stressful job. Examination revealed obese adult with height of 150cm, weighing 100kg with BMI of 33. His BP was 170/110. He started arguing with the doctor that his BP is raised because of stress, as last time his BP was normal about a week ago. He consulted his family physician about three months back when he passed small stone in the urine; his BP was slightly raised as was told by his doctor at that time. His BP was checked on follow up visits and was found to be variable from 140/90 to 160/100. His fasting blood glucose was 120mg/dl, cholesterol 240mg/dl, LDL 160mg/dl, HDL 35, VLDL 45mg/dl, triglycerides 290mg/dl, uric acid 7.4mg/dl, blood urea 40 and creatinine 1.2. Urine detailed report shows trace proteins and few RBCs. His ECG and X-ray chest PA view are shown in pictures.



Q1. How you define Hypertension, high normal BP and normal BP. What about this patient?

Q2. How is the Blood Pressure controlled in normal people? Why is BP fluctuating in this patient? How nervous control of BP is achieved? Can stress change your BP and How.

Q3. Does Kidneys play any role in BP control and How? What happens to BP in renal diseases?

Q4. How High BP effect cardiac and renal functions? What are the complications of Hypertension?

Q5. What are the secondary causes of hypertension and how they produce high blood pressure?

Q6. How will you explain X-ray findings in this patient?

Q7. How will you explain ECG findings in this patient?