Hypertensive heart disease: A new case image

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Clinical image description

Mrs Afroza, 48 years old, housewife came to the outpatient department with a 3 days history of central chest pain & the pain was also radiating to left shoulder & neck. She is diabetic (type 2) for last 8 years & hypertensive for 13 yrs & she was pre-echlamptic during her first pregnancy. On general examination her blood pressure was 180 over 130mmHg & the patient was mildly anemic. Precordium examination revealed soft 1st heart sound in mitral and tricuspid area, pan systolic murmur in left lower parasternal area. ECG & Doppler Echocardiogram was done. Echocardiogram showed increased left ventricular wall thickness concentrically & hypokinetic anterior wall. Non coapted mitral & tricuspid valve & Doppler study showed mosaic flow across the mitral & tricuspid valve during systole. The patient was diagnosed as a case of hypertensive heart disease as her blood pressure was not under control & eco showed concentric left ventricular hypertrophy, mild left ventricular systolic dysfunction, mitral regurgitation (trivial) & mild tricuspid regurgitation with mild pulmonary artery hypertension (pulmonary artery systolic pressure-35mmHg).

Previously patient took Amlodipine for high blood pressure. But the condition was not good. Then Telmisartan and Amlodipine was prescribed for her high blood pressure.

In developed countries, HHD are relatively common, especially in older age group. These are usually due to high fat diet, less physical activity. Positive family history & person age, high blood glucose level are also a major risk factor.

**Figure 1:** 4-D Echocardiogram showing mitral valve velocity-1.03m/s, peak gradient-1.37mmHg.

**Figure 2:** Anterior wall hypokinesia