A 42-year-old male patient presented to the emergency clinic with atypical chest pain and dyspnoea. Initial electrocardiographic (ECG) analysis revealed left ventricular hypertrophy diagnosed by Sokolov-Lyon criteria and concordant ST elevation with long R wave in DI, aVL and anterior leads (V2-V5), suggesting acute antero-lateral myocardial infarction (MI). T wave was biphasic in leads V5 and V6. There were some suspicious reciprocal ST changes in DIII and AvF aVL (Figure 1). ST segment elevation was minimally convex upwards, but mostly with obliquely straight morphology. Echocardiographic examination showed asymmetric septal hypertrophy (Figure 2) but there was no wall motion abnormality. Troponin levels stayed in the normal range. Subsequent coronary angiogram showed normal coronary arteries. Several ECGs obtained in the following days were unchanged. Finally, his old ECGs were found; the patient’s previous ECGs revealed the presence of persistent ST segment elevation for many years. Since ECG changes are observed in more than 90% of patients, ECG testing remains the most sensitive routinely performed diagnostic test for hypertrophic cardiomyopathy, although its specificity is low and none of the findings are typical or characteristic of the disease.1-2 Generally, the ECG is abnormal with localised or widespread repolarisation changes. Most commonly observed patterns are high voltage tall R waves in anterolateral leads (V4, V5, V6, I, and aVL) consistent with left ventricular hypertrophy, ST-T changes, marked T wave inversion in lateral precordial leads, left atrial enlargement, deep and narrow Q waves, and diminished R waves in lateral leads. Normal ECG is present in only 5% of patients.3-5 ST elevation concordant with long R wave suggesting acute anterior ST elevation MI as an ECG manifestation is rarely described in hypertrophic cardiomyopathy.6-9 An absence of simultaneous ST segment depression in reciprocal leads is a very important clue for differentiation from ST elevation of acute myocardial infarction. For other less clear asymptomatic patients, echocardiography is an invaluable useful tool to observe cardiac function wall
motion abnormality and cardiac structure. In conclusion, hypertrophic cardiomyopathy should be kept in mind in the differential diagnosis of ST elevation, particularly in asymptomatic patients.

**Conflict of Interest**
Authors declared no conflict of interest or financial support.

**Authorship Contribution**
All the authors contributed to the article.

**FIGURE 1**: Admitting Admission ECG shows left ventricular hypertrophy and concordant ST elevation with long R wave in DI, AvL aVL and anterior leads (V2-V5) suggesting acute antero-lateral MI. There was minute reciprocal ST changes in DIII and AvF aVF.

**FIGURE 2**: Parasternal long axis 2D echocardiogram shows asymmetric septal hypertrophy of the interventricular septum
REFERENCES


