

Left Ventricular Hypertrophy

Definition

Enlargement of the Left Ventricle of the heart, causing ECG changes that may mimic STEMI but which are generally benign.

History/Physical Exam

History may include hypertension, aortic stenosis, hypertrophic cardiomyopathy.

Key 12-Lead Features

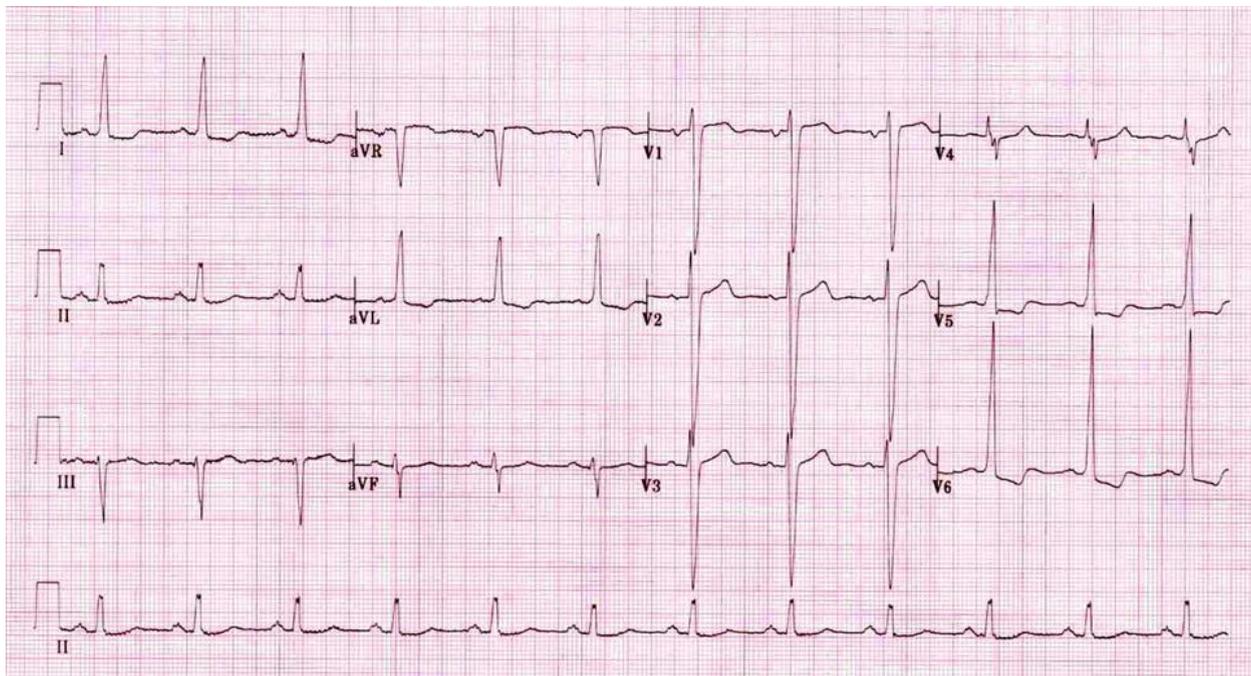
Presence of LVH

- $S(V1 \text{ or } V2) + R(V5 \text{ or } V6) > 35\text{mm}$

Strain Pattern

- ST Elevation V1-4
- ST Depression / Inverted T waves V5 and V6
- Generally proceeds from most elevated V1/2 to most depressed V6
- Consider utilizing LP15 measurements to help identify

12 Lead ECG Sample



Further Reading

Reference

1. Ogah OS, et al. Electrocardiographic left ventricular hypertrophy with strain pattern: Prevalence, mechanisms and prognostic implications. 2008. [[Link](#)]

