

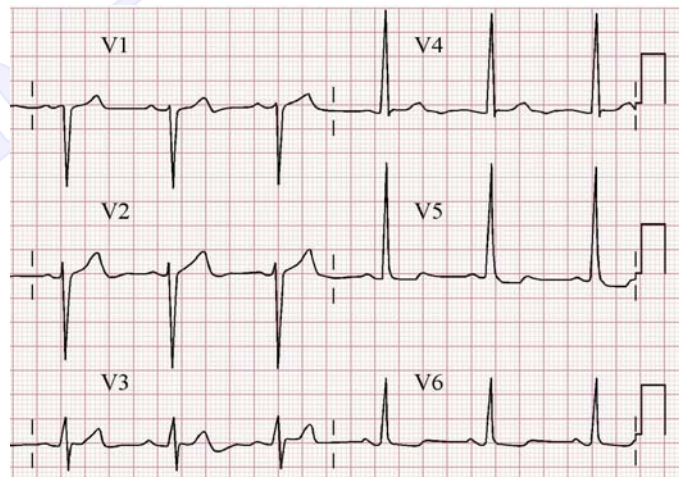
- ✧ The S waves are unusually deep in V6 and may be even deeper than the R wave is tall.

Other ECG signs of RVH include:

- ✦ Right axis deviation due to the overpowering current generated by a hypertrophied right ventricle.
- ✦ Ventricular repolarization changes manifest as downward sloping of the ST segment and T wave inversion, the so called ventricular strain pattern, may or may not be present in the right chest leads. (See V1 in above ECG.)
- ✦ P wave ≥ 2.5 mm tall in lead II, III, aVF or biphasic P wave in V1 suggesting the presence of right atrial enlargement. (Right atrial abnormality results from the right atrium having to pump blood into a thick-wall non-compliant hypertrophied right ventricle.)

In left ventricular hypertrophy (LVH), the configurations of the QRS complexes across the chest leads are also changed and consist of:

- ✧ Unusually tall R wave in left chest leads V5 and V6 and unusually prominent S wave in right chest leads V1 and V2. These are exaggerations of the normal configurations due to increase in left ventricular muscle mass.
- ✧ The sum of the S wave in V1 and the R wave in V5 or V6 is > 35 mm. (Tall R waves in chest leads is common among young and slender individuals. This finding alone should not be used as the only criteria of LVH.)



Additional ECG signs of LVH include:

- ✦ R waves taller than 14 mm in lead I or taller than 11 mm in Lead aVL. However, tall R waves in limb leads and chest leads do not always coexist.
- ✦ Left axis deviation may or may not be present.