

# Left atrial enlargement or complete interatrial block? - A letter 2011

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We will send a letter to Professor David Spodik about this question below:

Dear Professor Spodik

From your point of view to day justifies the electrocardiographic diagnosis of left atrial enlargement using just the ECG or this diagnosis has the same criteria that complete interatrial block?.

The term P mitrale has been used to describe a P wave that is abnormally notched and wide because this P wave is commonly seen in patients with mitral valve disease, particularly mitral stenosis. The changes are most often present in leads I and II and the left precordial leads.

The P mitrale pattern was observed in a third of patients with isolated mitral stenosis proved at surgery (1). These changes are not always due to dilatation or hypertrophy of the left atrium but rather may be caused by an intraatrial or interatrial conduction defect secondary to atrial myocardial damage.

Increased P wave duration in the limb leads is sometimes associated with increased P wave amplitude. An amplitude of more than 2,5mm is seen in about 5 to 10 percent of patients with left atrial enlargement due to left-side valvular heart disease, especially mitral valve disease or hypertensive heart disease.

When the duration of the P waves is not prolonged and the tall P wave are seen in inferior leads II, III and aVF, the changes closely mimic those of the P pulmonale. In such cases an abnormal terminal force (shift of the terminal P forces are associated with left atrial enlargement) in lead V1 and the presence of a LVH pattern aid in the differential diagnosis.

Could you explain to us?

Thank in advance and good Sunday dear teacher.

## References

1. Saunders JL, Calatayud JB, Schulz KJ, et al. Evaluation of ECG criteria for P-wave abnormalities. Am Heart J. 1967 Dec;74:757-765.

2. Gooch AS, Calatayud JB, Gorman PA, Saunders JL, CA. Left ward shift of the terminal P forces in the ECG associated with left atrial enlargement. Am Heart J. 1966 Jun;71:727-33.

