

# The human left Hissian system - 2011

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The human left Hissian system is, in the vast majority of the cases, trifascicular, and the complete intraventricular Hissian system (right bundle plus the 3 left bundle fascicles) is tetrafascicular.

Coronary artery disease involving proximal lesion of the left anterior descending coronary artery (before the first septal perforator), is the most frequent cause of left septal fascicular block (LSFB) in developed countries.

Chronic Chagasic cardiomyopathy is most frequent cause of LSFB in Latin America.

LSFB, as well as the other left fascicular blocks, presents as an isolated defect or associated with right bundle branch block or other fascicular blocks.

It differs from the left anterior and posterior fascicular blocks in terms of axis deviation. The latter two produce axis deviation in the frontal plane while LSFB does in the precordial leads.

The capital sign of LSFB is the presence of predominant anterior forces resulting in prominent R-waves in the right and medial precordial leads.

The diagnosis of LSFB is not only electrocardiographic but also clinical.

All other causes of predominant anterior forces should be ruled out, including normal rotation of the heart around its longitudinal axis, right ventricular overload, and infero-basal and lateral myocardial infarctions.