

## Interesting Electrocardiogram

# Incomplete Right Bundle Branch Block (IRBBB)

M. Irené Ferrer, M.D.

Consultant in Cardiology Metropolitan Life Insurance Company

Professor Emeritus of Clinical Medicine, College of Physicians and Surgeons, Columbia University

Consultant Electrocardiographer, Presbyterian Hospital, Columbia Presbyterian Medical Center, New York, N.Y.

The diagnostic criteria for IRBBB consist of a QRS duration of 0.10-0.11 sec. (in contrast to *complete* right bundle branch block where the QRS must measure 0.12 sec. or longer), as S wave in lead I, V5 and V6 and two R waves (rR') in V1 and/or V2. If the QRS complex measures only 0.09 sec. or less and yet there is an rR' in V1 or V2, this is considered only a normal variant and not an intraventricular conduction defect.

The tracing shown here is on a 68-year-old woman admitted with acute cholecystitis. There were no other cardiac findings or history. The QRS measures 0.103 sec., there is an rR' in V1 and S waves in I, V5 and V6. Hence, IRBBB is present.

The meaning of IRBBB as an isolated finding can be arrived at on clinical grounds. Normal individuals can have this abnormality. IRBBB is seen also in congenital heart disease (especially inter-atrial septal defects), myocarditis, infiltrative or fibrotic lesions (although these usually produce complete RBBB), acute dilatation of the pulmonary artery as in pulmonary emboli, right ventricular hypertrophy, and iatrogenically after cardiac surgery.

In insurance medicine, if there is no history or sign of cardiac disease, it is accepted as producing no risk and not given any weight in the evaluation. It is, however, from a clinical point of view, a delicate diagnosis which may provide hints as to unsuspected conditions.

