Interesting Electrocardiogram

PROGNOSIS OF TRIFASCICULAR BLOCK

M. IRENE FERRER, MD
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, NY

This tracing was taken preoperatively on a 75-year-old female with known heart disease who was taking digoxin, diuretics, nitroglycerine and theodur. It illustrates an IV conduction defect that remains prognostically a problem. There is sinus rhythm at 82/min. and a rare atrial premature contraction. There is a complete right bundle branch block and a marked left axis deviation (-53°) with a PR interval of 0.20–0.21 sec. — slightly long. Thus the suspicion arises that there is trifascicular block present (RBBB, left anterior fascicular block and decreased or sluggish conduction through the left posterior fascicle).

There has been considerable concern in recent years as to the risk of sudden death, complete heart block or syncope in subjects with bifascicular and trifascicular block. Two recent reports have emphasized the difficulties of predicting outcome. In a group of 554 patients neither clinical, electrocardiographic or electrophysiologic studies alone or in combination provided means of identifying possible heart block or sudden death. Myocardial failure, new infarcts, arrhythmias and the underlying heart disease accounted primarily for the deaths or development of complete block. Prophylactic pacing has not reduced the incidence of sudden death in the group.

Thus it would appear that only careful follow-up, with the use of Holter Monitor, exercise testing and electrophysiologic testing in symptomatic subjects, will resolve this difficult area in cardiology.

REFERENCES