ELECTROCARDIOGRAM OF THE MONTH

The author would be pleased to receive comment and controversy from readers in relation to explanations offered.

In the presence of right bundle branch block it is impossible to recognize the presence or absence of electrical effects of right ventricular hypertrophy. Not infrequently the clinical evidence also leaves much doubt.

The electrocardiogram shown here was obtained from a 70 year old woman who suffered moderate dyspnea on exertion. The blood pressure was 170/80 and there was a systolic murmur at the apex. The lungs showed moderate emphysema.

The routine electrocardiogram showed auricular fibrillation and right bundle branch block. Since this conduction defect (right bundle branch block) is common in middle aged and elderly patients in the absence of heart disease no conclusion is warranted regarding the presence of right ventricular hypertrophy that might result from pulmonary disease in this case. Since such evidence might be unmasked by the abolition of the conduction defect by slowing the heart rate the effect of carotid sinus stimulation was recorded.

As may be seen, slowing of the heart rate induced reversion to normal conduction and under these circumstances (beats x, y, z) no evidence of right ventricular hypertrophy can be detected.

This maneuver is occasionally of great value in problems of this kind. Even this occasional value justifies its application to all such problems.

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