tricular outflow tract. They reported the echograms of three such patients as showing the following features: prolonged apposition of the mitral valve with the ventricular septum, abnormal systolic anterior movement of the anterior mitral leaflet, and early closure and systolic flutter of the pulmonary valve. These echocardiographic features are similar to those described by Hagler et al. and Nanda et al. in patients who had dextrotransposition of the great arteries with muscular subpulmonic stenosis.

We have recently observed a different and perhaps more specific echocardiographic feature for aneurysm of the membranous ventricular septum in a 17-year-old patient with dextrotransposition of the great arteries and subpulmonic obstruction (64 mm Hg systolic gradient). At surgery, this subpulmonic obstruction was found to be secondary to bulging of a large aneurysm of the membranous ventricular septum into the left ventricular outflow tract. The echogram of this patient (fig. 1) revealed no mitral-septal apposition or systolic anterior motion of the mitral valve but instead showed an abnormal mass of echoes in the left ventricle. These echoes, which were multiple, fragmentary, and convex posteriorly, appeared in the left ventricular outflow tract during systole and disappeared during diastole. This echo appearance is similar to our previous observation in a patient with an aneurysm of the membranous ventricular septum with normally related great arteries.4

We believe that this echocardiographic observation may be more specific for an aneurysm of the membranous ventricular septum and should allow distinction from the more common muscular subpulmonic obstruction in transposition of the great arteries.

JAMES B. SEWARD, M.D.
ABDUL J. TAJIK, M.D.
EMILIO R. GIULIANI, M.D.
DOUGLAS D. MAIR, M.D.
Mayo Clinic and Mayo Foundation
Rochester, Minnesota

References

H-Q Interval and Bifascicular Block

To the Editor:

Although the results of a recent study by Vera et al. confirm our earlier findings, the conclusions drawn by these authors should be interpreted with great caution. Their recommendations for prophylactic permanent pacemaker implantation seem premature in the following classes of patients: 1. asymptomatic patients with bifascicular block and H-Q interval greater than 65 msec, 2. patients with bifascicular block accompanied by first degree A-V block, 3. patients with bifascicular block of more than three years' duration.

In two recent prospective follow-up studies on patients with bundle branch block, a higher incidence of heart block and mortality was found to be related to the degree of H-Q interval prolongation. Contrary to this, other investigators have not been able to find a higher incidence of heart block in patients with prolonged H-Q interval. In our (unpublished) prospective follow-up of 38 patients with right bundle branch block and left anterior hemiblock (mean follow-up 28 ± 13 months), one patient developed heart block at the 28th and one at the 36th month of follow-up. Both had markedly prolonged H-Q intervals (100 and 140 msec, respectively), and had experienced syncope. We believe that prophylactic permanent pacemaker implantation in asymptomatic patients with bifascicular block and H-Q intervals > 65 msec, in asymptomatic patients with bifascicular block and first degree A-V block, and in asymptomatic patients with bifascicular block of three years' duration is not acceptable and is in fact unwarranted at the present stage of our knowledge. Finally, in suggesting the safety of intravenous lidocaine in patients with bifascicular disease, Vera et al. have omitted two recent pertinent studies that found infra His delay or block occurring in several patients with bifascicular block following intravenous lidocaine infusion.

PREM K. GUPTA, M.D.
EDGAR LICHSTEIN, M.D.
KUL D. CHADDA, M.D.
City Hospital Center
Elmhurst, New York 11373

References

The authors reply:

To the Editor:

We appreciate the interest shown by Dr. Gupta and coworkers in our recent clinical investigation on the H-Q interval in

Figure 1. RV = right ventricle; VS = ventricular septum, MV = mitral valve, AN = aneurysm.