Correspondence

A Quadricuspid Aortic Valve

To the Editor:

I read with interest the case report of a quadricuspid aortic valve by Lai and associates (*Jpn Heart J* **32**: 731-4, 1991). However, I wish to correct for the record their statement that only one previous case was diagnosed by echocardiography.

In addition to the report by Herman and associates¹⁾ there were at least three more reports of echocardiographic diagnosis of quadricuspid aortic valve that the authors failed to cite in their article. The first report was that of McNamara and Nihill,²⁾ who described in 1986 the echocardiographic features of a quadricuspid aortic valve in one of their patients. These authors diagnosed both quadricuspid aortic valve and quadricuspid pulmonic valve by means of two-dimensional echocardiography. The second overlooked report of this entity—also in a single patient and also in 1986—was by Coeurderoy and coworkers.³⁾ The third report was of two cases by Chamsi-Pasha and colleagues in 1988.⁴⁾

Quadricuspid aortic valve, a rare entity that used to be discovered incidentally at autopsy or during surgery or aortography, is now being diagnosed more frequently during life, as a result of improvements in ultrasonographic technology. At the Mayo Clinic, 8 patients with quadricuspid aortic valve were found among 60,446 patients examined by echocardiography—an incidence of 0.013%.⁵⁾ For the period from July 1987 to May 1988 alone, 6 cases were found at the Mayo Clinic among 13,805 echocardiographic examinations—an incidence of 0.043%.⁵⁾ Whether or not transesophageal echocardiography may even yield a higher incidence of this entity than transthoracic echocardiography, as alluded to by Lai and associates, remains to be seen.

The diagnosis of quadricuspid aortic valve is of more than academic interest because patients with an accessory aortic cusp may develop progressive aortic regurgitation. In fact this is the usual way these patients present clinically, as true of the patient reported by Lai et al. These patients require prophylaxis against infective endocarditis,⁵⁾ which is one of the serious complications of quadricuspid aortic valve.

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