Correspondence

Systolic closure of aortic valve in patients with prosthetic mitral valves

Sir,

In a recent issue of the British Heart Journal, Eldar et al. describe their findings in 36 patients after mitral valve replacement. Using M-mode echocardiography, they demonstrated abrupt early systolic closure of the aortic valve in eight of their patients, and midsystolic closure in two others. In these two they postulated that a distorted left ventricular outflow tract was the cause for the midsystolic aortic valve closure. In their Fig. 5 (page 51) they demonstrate early aortic valve closure seen in eight of their patients who did not have any left ventricular outflow tract obstruction.

We have found this finding frequently, in about 20% of normal children and young adults (Fig.). As the authors comment, this early abrupt partial closure followed by fine systolic flutter is milder and less distinct than that seen in patients with discrete subaortic stenosis, and, also, here the aortic valve reopens immediately.

We think that their findings in eight patients are within normal limits and do not suggest any amount of distortion or obstruction caused by the prosthetic valve. The findings in patients with discrete subaortic stenosis are probably caused by an increase of a normal phenomenon.

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Reference


This letter was shown to the authors who reply as follows:

Sir,

We thank Dr Glaser for his remarks. We have come across early systolic closure of the aortic valve in some patients who appeared to have normal hearts, both clinically and echocardiographically. We were struck, however, by the abundance of this phenomenon in patients with a prosthetic mitral valve. We are not aware of other reports corroborating Dr Glaser’s personal experience, and therefore we still consider this finding to be unusual.

Furthermore, we disagree with Dr Glaser’s statement that these findings, namely, early systolic closure in patients with discrete subaortic stenosis, are “probably caused by an increase of a normal phenomenon”. The incidence of this finding in discrete subaortic stenosis is very high and considered to be one of its most typical (M-mode) echocardiographic signs, thus hardly making it a “normal phenomenon”. Most authors attribute early clos-
ure to distortion of blood flow in the outflow tract resulting from the fixed subaortic stenosis.

M Motro, M Eldar, Heart Institute, The Chaim Sheba Medical Center, Tel-Hashomer, Israel.

References


Notices

The third Einthoven meeting on past and present cardiology will take place in Leiden on 24 and 25 November 1983. Inquiries should be addressed to: Einthoven Foundation Symposium Secretariat, Mrs M Koek, Department of Cardiology, Leiden University Hospital, Rijnsburgerweg 10, 2333 AA Leiden, The Netherlands.

British Cardiac Society

The Autumn Meeting will be held at Wembley on 21 and 22 November 1983, and the closing date for abstracts will be 28 July 1983.

The Annual General Meeting for 1984 will take place in Leicester on 13 and 14 April 1984.