Correspondence

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Intraoperative left ventricular perforation with false aneurysm formation

Sir,

In the second case, described by Sharratt and his colleagues (1976) perforation of the posterior aspect of the atrioventricular ring occurred during operation and was successfully repaired. However, a false aneurysm developed, resulting in a communication between left atrium and left ventricle. Fig. 4 illustrates the echocardiogram of a Björk-Shiley mitral prosthesis in this case ‘showing normal opening and closing movement’. However, a protodiastolic abnormal anterior movement of the entire prosthesis was in fact shown.

A similar echocardiographic pattern associated with a reduced aortic closure sound to mitral opening sound interval was shown in 2 low profile Starr-Edwards, 5 Björk-Shiley, and 11 Beall mitral prostheses with paraprosthetic leak, out of a group of 90 normal cases (Yuste et al., 1975). Recently the same conclusions were reached in 6 cases with severe paraprosthetic regurgitation out of 56 with Björk-Shiley mitral valve replacement (Yuste et al., 1976). We concluded that the leak around the suture ring allows the prosthesis to move in an abnormal way, in early diastole.

In the case in question the false aneurysm developed at the site of the atrioventricular ring rupture, and repair led to an abnormal movement of the entire prosthesis in early diastole as shown by the misinterpreted echo recording.

This letter was shown to Dr Sharratt who replies as follows:

Sir,

We are grateful to Dr Yuste for having drawn our attention to the description by him and his colleagues of protodiastolic anterior motion of the mitral prosthesis in the presence of paraprosthetic leak. He points out that our Fig. 4 shows this in addition to the other echocardiographic features on which we based the correct diagnosis. There was no impairment of disc movement and our ‘normal opening and closing movement’ was intended to convey that.

Yours, etc

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References

