Expulsion of the Disk of a Björk-Shiley Aortic Prosthesis after Temporary Removal

To the Editor:

Sporadic cases of dislodgment of the occluders have been reported in the majority of artificial cardiac valvular prostheses. We report a case of expulsion of the disk of a Björk-Shiley aortic prosthesis.

CASE REPORT

A 42-year-old woman was diagnosed by cardiac catheterization as having severe mitral stenosis and grade-3/4 aortic regurgitation. The patient underwent mitral commissurotomy and replacement of the aortic valve with a No. 21 Björk-Shiley tilting-disk prosthesis. The prosthesis was fixed in place with 16 single sutures (Ethiflex). In the immediate postoperative period the clinical picture and the phonocardiogram suggested significant aortic regurgitation.

Repeat surgery was performed 13 days after the first procedure. It was discovered that an excessively large space existing between two of the sutures was responsible for the leak. In order to gain better access to this zone, we decided to remove the disk; we also rotated the valve within the sewing ring with the valvular holder designed by the manufacturer for this purpose. The leak was closed with a U suture, the disk was put back into position, and it was left functioning normally, being apparently well held in place. The patient was discharged from the hospital ten days later, without any evidence of aortic regurgitation.

Seventeen days after the second operation, the patient was awakened from her sleep by a nightmare, and seconds later she lost consciousness. She was readmitted to our hospital in cardiac arrest. All manipulations to induce recovery failed, and the patient died.

The autopsy revealed that the disk had dislodged from the rest of the prosthesis and had come to rest in the abdominal aorta. On examination of the valve, an excessive clearance between the struts and the disk was discovered.

DISCUSSION

We attribute the detachment of the disk in our patient to an excessive clearance between the struts and the disk produced during the temporary removal of the disk. It is less likely that the deformation of the struts occurred during the rotation of the prosthesis with the valvular holder. One of the advantages of the Björk-Shiley prosthesis is the possibility of rotating the valve within the sewing ring after its implantation. We have performed this operation numerous times without any type of complication.

The temporary removal of the disk of a Björk-Shiley aortic prosthesis was performed by Björk1,2 in his first two cases of thrombotic encapsulation of an aortic prosthesis; however, in his later cases, total thrombectomy was performed with a sucker after rotating the valve.3

This was our first case of dislodgment of the disk of a Björk-Shiley aortic prosthesis after 284 aortic valvular replacements with this type of prosthesis. It was the first time that we have temporarily removed the disk, and it will be the last.

Gabriel Telles, M.D.; José M. Maroñas, M.D.; and Alfonso Iglesias, M.D.
Department of Cardiothoracic Surgery
Clinica Puerta de Hierro
Autonomous University of Madrid

REFERENCES


Rectal Examination in Patients with Acute Myocardial Infarction

To the Editor:

I have read with interest the communication from Kostis1 entitled “Ventricular Fibrillation during Rectal Examination in a Patient with Acute Myocardial Infarction.” Our particular interest in this, of course, is based on the study we2 did which was published in 1969. The purpose of my present communication is to point out that Kostis1 has misquoted us in stating that we “recommened a routine rectal examination for patients with acute myocardial infarction.109265” I think it is clearly stated in our article that

we suggest that patients with myocardial infarction who are not in cardiogenic shock or who have no life-threatening arrhythmia receive a brief, gentle rectal examination to evaluate for fecal impaction, occult bleeding and prostate enlargement.209240

I still believe that this is a valid approach but that rectal examination should not be done routinely in patients without consideration of each clinical setting.

Gerald F. Fletcher, M.D., F.C.C.P.
Director of Internal Medicine
Georgia Baptist Medical Center
and Professor of Medicine, School of Medicine
Emory University, Atlanta

REFERENCES