Valve repair treatment in active infective endocarditis

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Received 29 May 2009; accepted 16 July 2009; Available online 22 August 2009

Keywords: Endocarditis; Bacterial; Aortic valve repair; Mitral valve repair; Vegetectomy

We read with interest the recent paper of Chen and co-workers [1]. We congratulate the authors for their successful treatment. The authors described a case of successful vegetectomy of the aortic valve for *Streptococcus mitis* infective endocarditis (IE) as an alternative treatment to valve replacement.

The authors completely excised all vegetations (three), 'from the surface of leaflet using a blade,' 'with all leaflet sparing.' We agree with Chen that vegetectomy in the early treatment for IE is an alternative, useful approach that should, in our opinion, be attempted prior to replacing the native valve. We agree as well that eradication of the infection and correction of the associated haemodynamic abnormality is the basic goal of surgical therapy for IE. Valve replacement is the preferred choice of most surgeons. However, this approach in early IE treatment carries a risk of recurrent infection; in our opinion, prosthetic endocarditis is even worse than native valve infection. A previous report of Lukács et al. [2] reported on a series of patients successfully treated by vegetectomy for IE on different valves.

A year ago, in our institution, we treated a 31-year-old man, addicted to intravenous drug use, presenting with *Staphylococcus aureus* mitral valve endocarditis. We performed vegetectomy on the chordae and on the posterior leaflet involving the annulus. The patient had no IE recurrence and has a normal-functioning mitral valve at 12 months follow-up.

Although we have treated a different valve, we would like to add two points to the surgical technique:

(1) We believe that during surgery for active IE, the primary goal being the eradication of the infection, a large excision of the infected area should be performed. Superficial cleavage of the vegetation from the valve leaflet could leave some infected tissue predisposed to recurrence.

In our patient, we excised the area of vegetation implantation. The excised area in the posterior leaflet was then closed with polypropylene interrupted mattress sutures. At that time, a pericardial patch was not required to repair the lesion because of abundant tissue as it was a large myxomatous valve. However, vegetectomy by patch closure has been reported in the literature [2].

(2) The authors recommend vegetectomy in the early phase of IE 'where there was merely vegetation on the involved valve, without any sign of abscess, perforation, or destruction in valve leaflet or subvalvular apparatus.' We believe that, whenever possible, salvage of native valve should be attempted and no prosthetic material should be implanted in an infected area. Our patient had vegetation on the subvalvular apparatus; both the vegetation and the involved chordae were excised. The patient had vegetation with a small abscess on the posterior annulus as well, which was excised and cleaned. Closure was again performed using polypropylene interrupted mattress sutures.

Valve repair was completed by reinforcement and reduction of the posterior ring, and by commissuroplasty using polypropylene sutures. No prosthetic ring, or any other prosthetic material, or polyfilament sutures were used.

We believe these small technical aspects could be of help in the treatment of such patients.

Areas where vegetations are implanted should be widely resected. Annulus or subvalvular apparatus involvement should not represent a contraindication to valve repair treatment.

References


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doi:10.1016/j.ejcts.2009.07.023