

***Brucella* Endocarditis: The Importance of Surgical Timing After Medical Treatment (Five Cases)**

İbrahim Özsöyler, Levent Yılık, Şahin Bozok, Sibel El, Bilgin Emrecan, Serdar Biçeroğlu, and Ali Gürbüz

Introduction: *Brucella* endocarditis is a disease that is hard to treat medically and has a high mortality. Immediate surgery after medical treatment is very important because delaying surgery may lead to that are difficult to repair. **Methods:** Five patients who were admitted to our institution with a diagnosis of *Brucella* endocarditis were medically treated with doxycycline (200 mg/d), rifampin (600 mg/d), and ceftriaxone (2 g/d). Preoperative mean medical treatment time was 5.2 weeks (range, 4-6 weeks). The patients were taken for operation when their general status improved. We report in this study the results of these patients. **Results:** Three patients had aortic valve replacement whereas 2 had both aortic and mitral valve replacements. No mortality or morbidity was encountered in the patients. Mean postoperative hospitalization time was 15 days (range, 12-19 days). The patients were discharged with doxycycline (200 mg/d) and rifampin (600 mg/d) but without antipyretic medication. Postoperative antibiotherapy was continued up to a mean of 3.6 months (range, 2-6 months). Mean postoperative follow-up time was 15.8 months. None of the patients needed hospitalization in their follow-up time. **Conclusion:** Adequate preoperative antibiotherapy, immediate surgery, and continuation of postoperative antibiotherapy according to clinical

progress seem to be a convenient treatment strategy for *Brucella* endocarditis.
© 2005 Published by Elsevier Inc.

Endocarditis is a rare but a severe complication of brucellosis.¹ Endocarditis due to *Brucella* species can be seen more in the regions where rheumatologic heart diseases are widespread. Brucellosis is frequently seen in Turkey. Because of this, *Brucella* endocarditis, which is hard to treat, is not rare in our Turkey. Antibiotherapy followed by surgery seems to be the most effective treatment recently. Severe tissue damage may be encountered in case of delayed surgery.^{1,2} We report in this study 5 patients with *Brucella* endocarditis who were treated in sequence with combination of medical and surgical therapy between September 2001 and February 2004.

Methods

Patients

Five patients were hospitalized at different times with the symptoms of fever, dyspnea, weakness, and back pain. All of the patients were men, with a mean age of 36.6 years (range, 29-44 years). All of the patients gave a history of intermittent fever reaching 40°C. The patients inhabited rural areas and were working as farmers and livestock producers. These patients had been given different types of antibiotherapies in some primary health care units. However, they were referred to our institution as their general status got worse.

From the Departments of Cardiovascular Surgery, Infectious Diseases, and Cardiology, Ataturk Education and Research Hospital, İzmir, Turkey.

Address reprint requests to Dr İbrahim Özsöyler, Department of Cardiovascular Surgery, Ataturk Education and Research Hospital, T. Aktaş Cad No 2/10, Narlidere, İzmir 35320, Turkey; E-mail: ibrahimozsoyler@yahoo.com 0033-0620/\$ - see front matter

© 2005 Published by Elsevier Inc.
doi:10.1016/j.pcad.2004.10.001

All of the patients were carefully examined, and routine laboratory studies were done on admission. Consecutive blood cultures were taken from the patients. *Brucella* standard tube agglutination tests were done on the patients, and the results were 1/320 or higher.

Data of the patients who had the diagnosis of *Brucella* endocarditis after echocardiographic and laboratory examination are given in Table 1. The first patient had vegetations on the mitral and aortic valves, peak systolic gradient of 36 mm Hg, and moderate-degree regurgitation on the aortic valve on echocardiography. Severe regurgitation on the mitral and aortic valves and a big vegetation on the aortic valve were determined in the second patient. Moderate-degree aortic regurgitation and a big vegetation on the non-coronary cusp were seen in the third patient. Mild-degree aortic stenosis (peak systolic gradient of 20 mm Hg), moderate-degree aortic and mitral regurgitation, and small vegetations on both of the valves were seen on the echocardiography of the fourth patient. Severe aortic regurgitation and a big vegetation on the valve were seen in the fifth patient. An endocardiographic view of a patient that shows a big vegetation on the aortic cusp is seen in Fig 1.

These patients were observed by the Departments of Infectious Diseases, Cardiology, and Cardiovascular Surgery of our institution. The patients had a triple antibiotherapy besides cardiac medications (digoxin, diuretics, positive inotropic agents, etc). Antibiotherapy regimen includes doxycycline (200 mg/d), rifampin (600 mg/d), and ceftriaxone (2 g/d). Symptomatic improvement was seen in the patients after cardiac medication and antibiotherapy. Patients were taken to cardiac operation without any

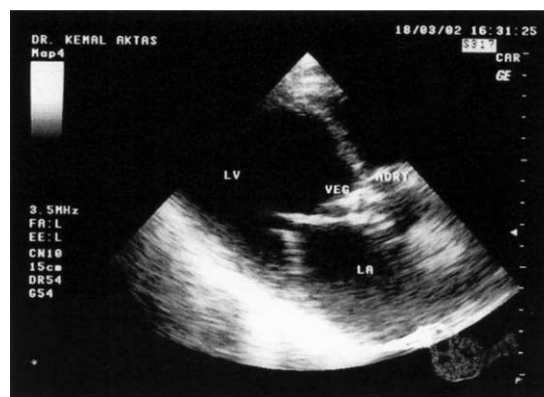


Fig 1. Echocardiographic view of a big vegetation located in the noncoronary cusp of aortic valve of a patient who had severe aortic regurgitation.

delay as the fever and the other symptoms disappeared. The period that passed from the diagnosis of *Brucella* endocarditis to the operation is given in Table 1.

The patients were hospitalized in the Infectious Diseases Clinic during their medical treatment and were routinely observed by the Departments of Cardiology and Cardiovascular Surgery. They were examined weekly using echocardiography. Blood cultures, which were taken before antibiotherapy, revealed no growth. The patients were taken for operation after the antibiotherapy.

Surgical Technique

The patients were operated under general anesthesia. Cardiopulmonary bypass was established after bicaval and aortic cannulation. The affected valves were explored after cross-clamping the aorta. Tissue loss was detected in most of

Table 1. Patient's Data

Patient	Age (y)	Echocardiography	Vegetation	<i>Brucella</i> Agglutination Titration	Preoperative Antibiotherapy (wk)	Operation	Postoperative Antibiotherapy (mo)
1	44	AS, AR	+	>1/640	6	AVR	6
2	36	AR, MR	+	>1/320	4	AVR, MVR	4
3	29	AR	+	>1/640	5	AVR	3
4	33	AS, AR, MR	+	>1/640	5	AVR, MVR	2
5	41	AR	+	>1/640	6	AVR	3

Abbreviations: AS indicates aortic stenosis; AR, aortic regurgitation; MR, mitral regurgitation; AVR, aortic valve replacement; MVR, mitral valve replacement).

Download English Version:

<https://daneshyari.com/en/article/9179064>

Download Persian Version:

<https://daneshyari.com/article/9179064>

[Daneshyari.com](https://daneshyari.com)