

CASE REPORT

A CASE OF MITRAL VALVE VEGETATION THAT COMPLETELY RESOLVED WITH ANTIBIOTIC TREATMENT

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A 48-year-old male teacher was admitted to the cardiology unit for evaluation of fever of 5 months' duration. The fever was low grade associated with chills and night sweats but no rigors. There were no systemic complaints nor was any dental or other procedure performed in the recent past. He was treated by many general physicians with a variety of antibiotics and antimalarial but there was no sustained response. He was admitted to the general medical unit as a case of PUO and thoroughly investigated but except for raised Erythrocyte sedimentation rate (ESR) nothing was positive. He was empirically started on Ofloxacin infusion but his fever did not respond. Later he was started on anti TB drugs but there was no response upto one month. Steroids were added to the regimen but still no response.

He had sustained a myocardial infarction in 1986 and 1989 and had a Coronary artery bypass graft (CABG) done in 1993, and was doing well with it. He was reevaluated in cardiology with a temperature of 100°F. A systemic exam only revealed soft systolic murmur at the apex radiating to the axilla. All the investigations were repeated and in addition echocardiography was performed which was not done before. All the laboratory test was negative again, and the echo showed mitral valve vegetation. A diagnosis of possible infective endocarditis was made and as the blood cultures were negative, he was empirically started on Penicillin and gentamicin but there was no response upto ten days. Echocardiography was repeated that showed an increase in the size of vegetation which was confirmed on transesophageal echocardiography (Fig-1). The patient was switched over to Ceftriaxime, because of its better potency and broader spectrum, 1 gram three times a day (TDS). On the 3rd day his fever began to respond and he felt better two weeks after initiation of Cefotaxime, TEE was repeated showing complete resolution of vegetation. Treatment was continued for another week and on a follow up a month later he was found to have totally recovered and returned to his job.

DISCUSSION

This case report of pyrexia of unknown origin was investigated by various physicians, and as usual empiric treatment including antibiotics, anti-TB, steroids etc. were tried, without clinical response, when patient was admitted in cardiology ward, for work up of pyrexia of unknown origin (PUO).

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Figure-1



Figure-2

Echocardiography was performed, this is one investigation, that was not done in his prior work up for various reasons, and probably because patient did not have a history of valvular heart disease. Echo cardiogram clinched the diagnoses with the

demonstration of vegetation on the mitral valve.¹ Another important aspect of this case is that the patient did not respond clinically to Gentamicin and penicillin and a TEE echo performed at that time showed persistent vegetation.²⁻³ But when he was switched to Cefotaxime, he responded dramatically, his fever subsided, he started eating, and a transesophageal echo

done after two weeks of Cefotaxime therapy, showed complete resolution of mitral valve vegetation⁴ (refer

to TEE pictures before treatment and after treatment Fig-2).

Usually with treatment vegetation become sterile, and most of these vegetations persist chronically on repeated echoes however, in this case with treatment, mitral valve vegetations completely resolved.

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