Infective endocarditis after mitral valve repair wherefore mitral valve replacement was performed

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Background: Mitral valve prolapse (MVP) is a common disorder, affecting 2-3% of general population, characterized by myxomatous degeneration of mitral valve cusps¹. It is a progressive disease which may lead to severe mitral regurgitation (MR), increase in the mitral annular diameter, left atrial enlargement, atrial fibrillation, thromboembolic events, left ventricular dysfunction, heart failure and sudden cardiac death¹. Therapeutic modalities for treating severe MR include mitral valve repair and replacement². Following surgical treatment possible complications include infective endocarditis, sepsis, thromboembolic events, hemorrhage, artificial valve failure, pericardiotomy syndrome etc. Mitral valve repair, when compared to mitral valve replacement, shows lower mortality rate, therefore guidelines recommend it as the method of treatment. It is also important to notice that mitral valve repair shows lower rate of infective endocarditis³.

Case report: In this article we present a case of young woman who had mitral valve prolapse with severe symptomatic MR. After mitral valve repair was performed, patient developed *Staphylococcus epidermidis* endocarditis (and consequential sepsis), which was verified via transthoracic and transesophageal echocardiography. After developing anaphylactic reaction to vancomycin and DRESS syndrome on teicoplanin and rifampicin, antibiotic therapy was changed to fosfomycin and ciprofloxacin. Additionally, postcardiotomy syndrome was present. Control echocardiography showed a loose, flotation mass with a thin pedicle, connected to the basis of anterior mitral cusp, on the atrial side, 12x8 mm in diameter. Due to its high embolic potential, in consultation with cardiac surgeon, mitral valve replacement was done, and mechanical artificial mitral valve was implanted. Following the procedure, patient fully recovered.

Conclusion: MVP is progressive disease which can result in severe MR requiring surgical treatment. As mitral valve repair shows lower mortality rate in this case it was surgical treatment of choice. Unfortunately, our patient developed infective endocarditis, sepsis and postcardiotomy syndrome, which required prolonged hospitalization. Complex antibiotic therapy led to clinical recovery, but because of floating mass with high embolic potential, we opted for reoperation.

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LITERATURE

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