

Fungal endocarditis: Case Reports

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ABSTRACT

Fungal endocarditis (FE) is a rare disease with a poor prognosis, and with the high risk of morbidity and mortality about greater than 50% of the population affected. *Candida* species and *Aspergillus* species particularly *Candida albicans* are the two most commonly isolated pathogen. It is most prevalent in patients who are immunosuppressed and intravenous drug users, especially in pediatrics.

Fungal endocarditis is increasingly reported in four major groups of the native valve, prosthetic valve, endocardial surface, and indwelling cardiac device-related endocarditis. Fever and changing heart murmur are the most common clinical symptom. Some patients may have a fever of unknown origin as the onset symptom. Early FE detection can be difficult because it often lacks some classic signs and symptoms found in bacterial endocarditis. Fungal endocarditis is reported less frequently than bacterial endocarditis, with an incidence of 1-10% of the total infective endocarditis cases.

In here the Cardiac valve, and embolic materials obtained during open heart surgery in suspected infective endocarditis (IE) patients were examined for fungal infections based on direct smear (KOH and CFW preparation), culture, and PAS and H&E stain of histopathological sections. Blood culture performed for all samples.

Three old female cases of fungal endocarditis were determined and reported. The etiologic agents were one case of *Acremonium* and two cases of *Candida tropicalis* (Figure I, II & III). Blood culture was negative in all case.

Early diagnosis in fungal endocarditis and differentiating the fungal elements from other etiological agent's particular bacterial cells that produce almost similar symptoms is important, so the physician can give effective and faster treatment. Even optimum antifungal therapy remains debatable; for instance, *Candida* endocarditis treating can be difficult because the *Candida* species can produce biofilms form on native or prosthetic heart valves that suggested, thus combined antifungal treatment appears superior to monotherapy.

Keywords: Endocarditis, Infection, Fungal endocarditis, *Candida tropicalis*, *Acremonium*