

## **Abstract**

Fungal endocarditis is a rare and fatal condition. The diagnosis of this condition is challenging, and most are revealed only during autopsy. *Candida* and *Aspergillus* account for most of the cases of fungal endocarditis which is more common with prosthetic valves and extremely rare in native valves. It is very rare in young healthy adults without any risk factors. Optimum antifungal therapies are still debatable.

This is a case of 24 years old, previously healthy mother of two children who presented with a history of fever and cough for three weeks duration. Initially cough was non-productive and subsequently developed into whitish sputum without diurnal variation or hemoptysis. She came out with a history of loss of appetite without significant weight loss and exertional dyspnoea which was progressive over three months duration with a history of menorrhagia. There were no features suggestive of a connective tissue disorder or rheumatological condition other than alopecia. Other Systemic inquiry was negative.

On general examination she was pale. Respiratory system examination revealed bilateral diffuse coarse crepitations and other systemic examinations were unremarkable. In cardiac examination there are no murmurs specifically. Full blood count revealed neutrophil leukocytosis with elevated inflammatory markers but blood, sputum and urine cultures failed to grow any organisms . Chest X-ray revealed bilateral cavitating lesions and trans-thoracic 2D-echo was normal. Pulmonary TB was excluded. Her urine full report revealed microscopic hematuria. She failed to respond to broad spectrum antibiotics and liaising with the rheumatology team we started her on treatment for Granulomatosis with polyangiitis. She was initially responded to steroid and on the second day she developed fever spikes again. Then she underwent broncho-pulmonary lavage which was positive for candida and aspergillosis .Transesophageal echo was done thereafter, it revealed tricuspid valve vegetation. After discussing with the microbiologist, cardiologist, cardiothoracic surgeons and rheumatologist she was started on antifungals and was referred for surgical valve repair.