Abstract: P1257

Eusthacian valve endocarditis - a rare case of pyrexia

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Topic(s):
Echocardiography: Masses and Sources of Emboli

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Background/Introduction
Infective endocarditis (IE) is defined as an infection of the endocardial surface of the heart, which may include one or more heart valves, the mural endocardium, or a septal defect. The Eustachian valve is a structure localized between the inferior vena cava and the right atrium. Here we discuss a 68 year old lady who presented with fever and decreased appetite.

The Case
68 year old female presents to the emergency department with a 10 day history of decreased appetite, fever and diarrhea. Initial Investigations showed elevated white cell count of 14,000 and C reactive protein of 266. Blood Cultures were also taken and were positive for Streptococcus agalicticae. The initial clinical impression was that of a gastroenteritis with secondary sepsis and the patient started on ciprofloxacin 400mg TDS intravenously.

Past Medical History - NG colon (ileostomy formation), Deep Vein thrombosis

Patients diarrhea improved over the next few days yet she kept spiking fever. Since no obvious septic focus was found a transthoracic echo was performed. This was found to be negative for any vegetation. However the clinical suspicion for IE was very high and we then proceeded to Trans esophageal echocardiography. This showed a giant Eustachian valve with a fluttering structure at its tip in keeping with a vegetation.

The patient was treated for IE with Gentamicin and Ceftriaxone IV as guided by bacterial sensitivity and made a remarkable recovery.

Imaging
Transthoracic echocardiogram - Normal, No signs of vegetations.
Transeosophageal echo showed a giant eustachian valve with a fluttering structure at its tip in keeping with a vegetation.

Discussion
Infective endocarditis (IE) is defined as an infection of the endocardial surface of the heart, which may include one or more heart valves, the mural endocardium, or a septal defect.

The Eustachian valve is a structure localized between the inferior vena cava and the right atrium. In the fetal circulation this valve directs the blood flow from the vena cava through the foramen oval into the left atrium. In an adult the persistence of this valve is uncommon.

Right-sided endocarditis occurs predominantly in intravenous drug users, in patients with pacemaker or central venous lines and in patients with congenital heart disease. The vast majority of cases involve the tricuspid valve. Eustachian valve endocarditis is an uncommon disease with similar signs and symptoms of the tricuspid valve.
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Conclusion
This case highlights the importance of transesophageal echo in the diagnosis of IE. Patients with a high clinical suspicion of IE and a confirmed bacteremia with a normal trans thoracic echo should undergo TOE to confidently exclude IE.