

ABNORMAL RHYTHM - A CASE REPORT.

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Abstract:

A 50 years old male with no co-morbidities presented to the emergency department with the 2days history of a productive cough and cold without fever. The patient also complained of mild chest pain which increases on deep inspiration associated with fatigue and sweating of 1-day duration. With the diagnosis of atrial flutter, he was admitted in CCU under cardiology where the rhythm changed to atrial fibrillation with the fast ventricular rate. The patient's rhythm was reverted back to normal sinus rhythm with the Amiodarone infusion.

Keywords: Atrial flutter, atrial fibrillation, Amiodarone.

Introduction:

This case shows the progression of upper respiratory tract infection leading onto an arrhythmia. The Viral heart disease, also known as myocarditis which is the inflammation of the muscle myocardium is a condition caused by a virus. It is in rare cases that an infection and inflammation can damage and weaken the heart and triggers heart failure and heart rhythm irregularities.¹

Case Report:

A 50-year-old male patient presented to the emergency room with two days history of a cold and productive cough with mild chest pain which increases on deep inspiration, associated with fatigue and sweating of 1day duration. He denied fever, chills, headache, vomiting, palpitations, and shortness of breathing or any history of

recent travel. No significant past medical history. He has a family history of cardiac disease. No history of smoking or drinking alcohol.

On arrival, the patient was alert and orientated to time place and person. No signs of dehydration, no cyanosis, no clubbing or lymphadenopathy.

O/E:

Vitals: BP-102/64mmHg, PR-81bpm, RR-20cpm, SPO2-97%, Temp-37 degree Celsius.

Systemic examination:

CVS- S1 variable

RS - air entry equal on both sides

Crepitations in the right midzone

Investigations:

ECG: Multiple atrial ectopies/atrial flutter with ST changes in inferior leads.

Trop T: Less than 40 (Negative).
Trop I: Less than 0.100 (Negative).
CKMB – 71.2 (HIGH)

With the diagnosis of atrial flutter, patient was admitted in CCU under cardiology for further evaluation and management. In CCU His vitals were monitored continuously. ECG was repeated and it showed atrial fibrillation with a fast ventricular response. Troponin I was repeated which was negative. CKMB was done and has decreased to 67.7. 2D ECHO was done which showed good LV function and mild LA dilation. Whereas the other lab investigation results were unremarkable.

The patient was treated with infusion of injection Amiodarone and was reverted back to normal sinus rhythm. He was also treated with antiviral medications. On the second day, he was discharged in stable condition with the advice of follow up and to avoid physical performance.

Discussion:

The incidence of cardiac arrhythmias in upper respiratory tract infection is a rare entity. In our case, it was started with atrial flutter and then changed to atrial fibrillation with the fast ventricular rate. There are studies which show patients who had been diagnosed with heart attacks had a history of upper respiratory tract infections.

Mild upper respiratory tract infections have 13times higher chance to cause heart-related conditions as it is likely to trigger the inflammation and toxins damaging the blood vessels.²

Another study done in Aston University shows the impact of common infections leading onto hospitalization may substantially increase the risk of heart attacks, strokes, and even death. Patients admitted with respiratory tract infections are 40% more likely to suffer heart attacks, arrhythmias, strokes.³

Conclusion:

Cardiac rhythm abnormalities in patients with viral upper respiratory tract infections are rare but have to be in the differential diagnosis when patient's presents with chest pain and fatigue associated with upper respiratory tract infections.

References:

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