

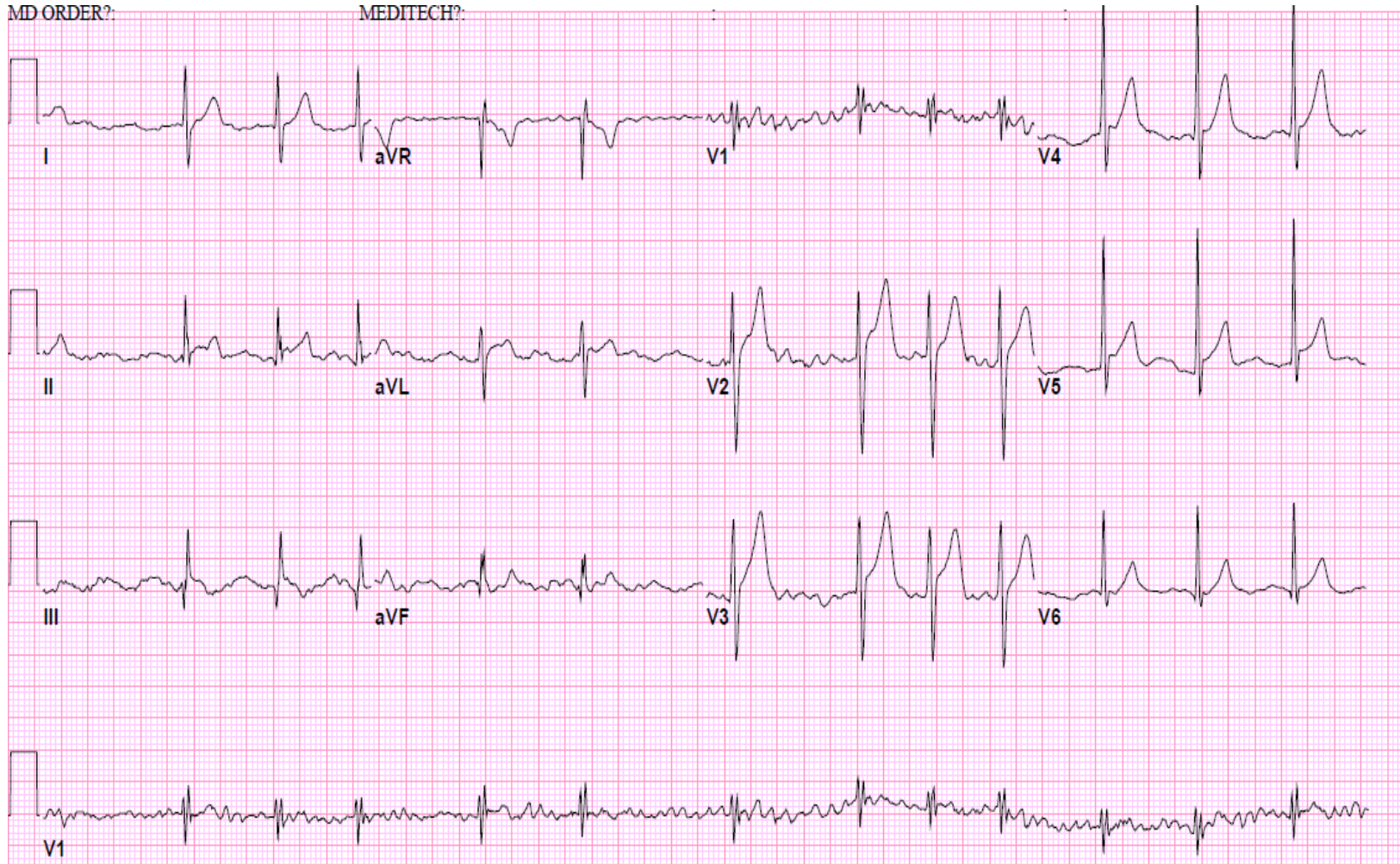
EKG of the Week Sep 13 2010

This EKG is from a 17-year-old previous healthy boy who presented to the ED with acute onset of palpitations.

1. What is the rhythm?
2. Assume that his echocardiogram shows normal cardiac structure and function. What medical conditions can cause this problem?
3. What treatment, if any, is needed?

MD ORDER?:

MEDITECH?:



ANSWER FOR EKG of the Week Sep 13 2010

This EKG is from a 17-year-old previous healthy boy who presented to the ED with acute onset of palpitations.

1. What is the rhythm?

This is a narrow complex, irregularly irregular rhythm, which is atrial fibrillation.

2. Assume that his echocardiogram shows normal cardiac structure and function. What medical conditions can cause this problem?

In young people, “lone” atrial fibrillation is usually idiopathic, but can sometimes be caused by hyperthyroidism, acute alcohol use (“holiday heart”), excessive stimulant (e.g. caffeine) ingestion, and a few other uncommon causes.

3. What treatment, if any, is needed?

The goal of therapy is to restore sinus rhythm, and frequently we choose conscious sedation and synchronized cardioversion as long as the arrhythmia has not been prolonged. Occasionally, we may also consider an attempt with medical cardioversion with an oral dose of flecainide or propafenone.