

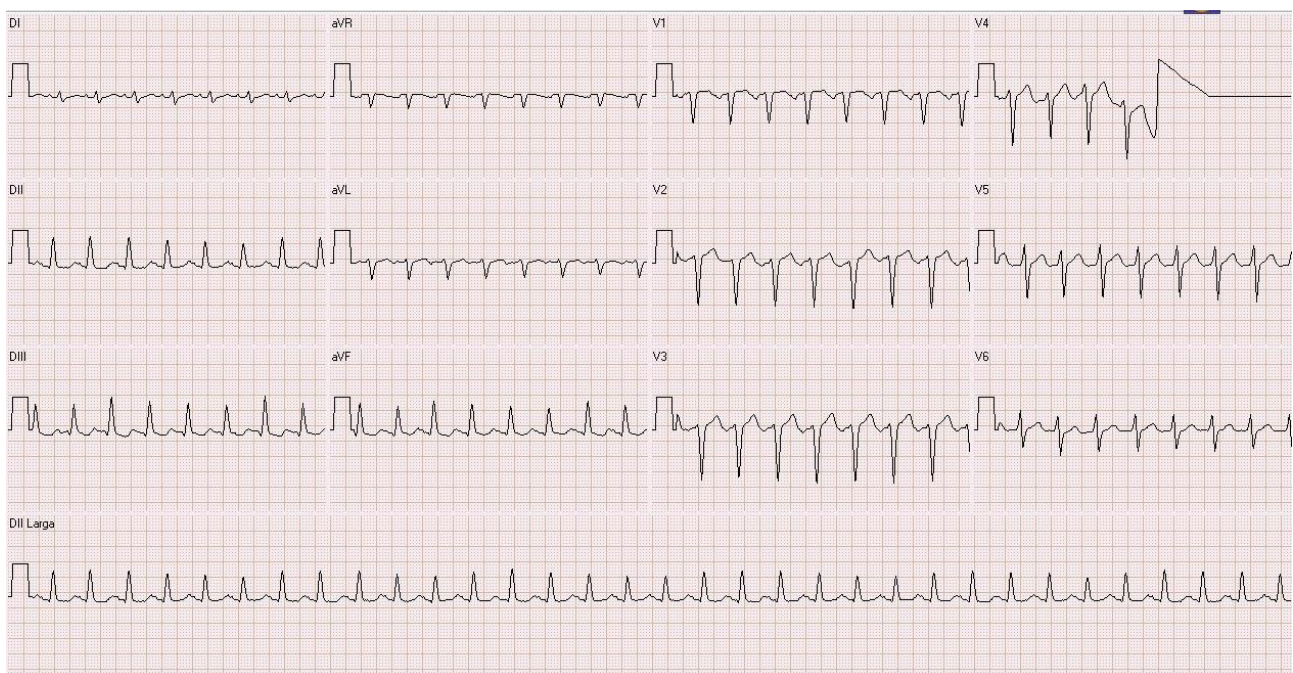
¿Aleteo auricular? - 2008

Lucas Barbieri

Somos dos estudiantes de medicina de 6to. año y trabajamos de electrocardiografistas. En la clínica los cardiólogos discutieron sobre este electro, algunos dijeron que podía ser un aleteo, y a nosotros nos quedan dudas. ¿Sería mucha molestia si le pedimos que lo exponga en el forum para saber qué opinan?

Tiene 53 años, tabaquista.

Lucas Barbieri





OPINIONES DE COLEGAS

En mi opinión, no cumple con criterios para considerarlo como un aleteo auricular, ondas en serrucho en cara inferior y positivas en V1, como así tampoco criterios de frecuencia que nos hagan sospechar aleteo. A mayor aumento se ven claramente la onda P positiva en dichas caras, casi montadas sobre el final de la onda T compatible con una taquicardia auricular

Saludos

Enrique Luis Giser

Dear pupil Lucas Barbieri: Excuse-me my answer in English language but it is very necessary for medicine students as you are.

DIAGNOSIS: Atrial flutter with 1:1 AV conduction

Atrial flutter (AFL) is a rapid, regular atrial tachyarrhythmia that occurs most commonly in patients with underlying structural heart disease. AFL with 1:1 atrioventricular (AV) conduction is a rare occasion. Clinicians should be aware of the potential for 1:1 AV conduction in AFL patients, especially in those with remarkable prolongation of the cycle length in addition to enhanced AV conduction(1).

AFL with 1:1 AV conduction (rare) is a medical emergency. The ventricular rate near 300 bpm must be treated immediately. 1:1 AV conduction may be found in the following circumstances:

A) Pre-excitation of WPW type, because the stimulus is conducted in anterograde fashion by the anomalous pathway. Pseudo-Mahaim (AP-M) fibers are a rare variant of atrioventricular (AV) accessory pathways. Atriofascicular and atrioventricular accessory connections are characterized by slow conduction and decremental properties. Dual physiological AV node pathways slow and fast, are observed in a large number of patients with AP-M. Therefore, there is substrate for AV nodal reentrant tachycardia (AVNRT) in addition to antidromic AV reentrant tachycardia (AVRT) with LBBB-like morphology. Other arrhythmia such as AF or AFL and VF are also observed(2)

B) Atrial flutter secondary to hyperthyroidism(3);

C) Flutter of the pediatric group. A combination of V1 and lead III increases the number of patients in whom the mechanism of the supraventricular tachycardia in children could be identified. Therefore, Liberman et al (4) recommend that V1 should be combined with an inferior limb lead during cardiac monitoring for optimal identification of the mechanism of SVT in children.

D) Consequence of initial use of IA class drugs (quinidine, procainamide or disopyramide) by atrial slowing and by vagolytic anti-cholinergic action in the AV junction that this group of drugs causes, especially if the drugs were used without administering digoxin, calcium antagonists or β -blockers previously in order to control the rate of ventricular response. Class IA antiarrhythmic drugs, especially quinidine and disopyramide, may cause 1:1 AV response because they reduce atrial rate and are vagolytic. However, propafenone is a Class IC agent and has no anticholinergic properties, and the occurrence of 1:1 AV conduction at a rate of about 250 beats/min is an important side effect that, although uncommon, should be recognized. Additionally, flecainide has potential to cause atrial flutter with rapid ventricular response(5).

E) Secondary to adenosine administration: This drug occasionally induce a marked acceleration in the ventricular rate of a patient with an undiagnosed atrial flutter, causing atrioventricular conduction (1:1).(6).

References

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- 4) Liberman L, Pass RH, Starc TJ. Optimal surface electrocardiogram lead for identification of the mechanism of supraventricular tachycardia in children. *Pediatr Emerg Care*. 2008;24:28-30.
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All the best

Andrés.

Hi

Please let me provide an alternative diagnosis to AFL with 1:1 conduction.

As the ventricular rate is about 125 to 130 bpm, and the patient is not taking antiarrhythmic drugs to slow the AFL cycle length, atrial tachycardia should be also considered.

AVL (to the best of my eye) shows a negative atrial deflection suggesting left sided origin. Thus, left atrial tachycardia arising from the left atrium (or pulmonary veins) is part of the differential diagnosis.

Best personal regards,

Dr Adrian Baranchuk, MD FACC

Assistant Professor of Medicine

Estimado Doctor Pérez Riera: me preocupa la onda en DI que parece una actividad

auricular clara y de polaridad positiva. ¿No podría ser una taquicardia auricular derecha?
Creo que con ese ECG no se puede ser tan categórico.

Simón Pero