

Intermittent AF in patient without apparent structural heart disease and spontaneous type 1 Brugada pattern – 2008

Dr. Bortolo Martini

De M. G

Male, no family history, normal 2d echo
Syncope in 2006

**Masculino, sin historia familiar de relevancia, Eco normal hace 2 dias
Antecedente de síncope 2 años atrás.**

19 november 2008

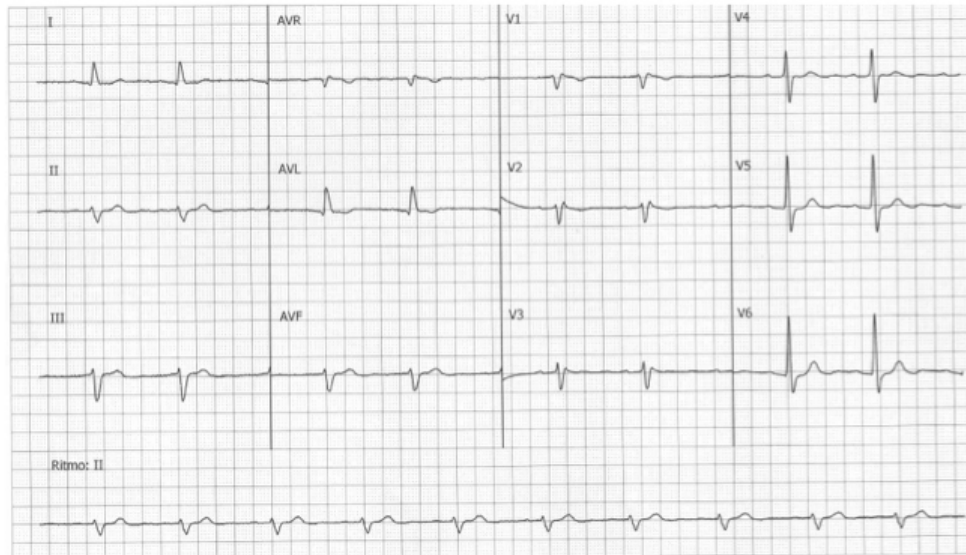
came to ED because of palpitations

El 19 de noviembre de 2008 se presenta al departamento de emergencias con queja de palpitaciones y se realiza este ECG



20 november 2008

ECG realizado el 20 de noviembre un día después.



Question Pregunta

- **What will be your behaviour?**
- **Cual deberá ser nuestra futuro comportamiento?**

- **Please answer if you want to see next slide!**
- **Por favor respondan si desean ver la próxima diapositiva!**

OPINIONES DE COLEGAS

Dear Bortolo:

First ECG diagnosis (November 19):

Rhythm: atrial fibrillation with appropriate ventricular response.

The first two QRS complexes are wider than the last two QRS complexes (third and fourth QRS complexes) (please see II lead): Aberrancy of intra ventricular conduction by left posterior fascicle?: The first two QRS complexes have qR pattern in inferior leads and rS in VL lead with deeper S wave in V2-V3. The third and fourth complexes have not these dromotropic features.

Repolarization: Saddle-back type ST-segment elevation (type 2 Brugada pattern) on the first 3 beats and type 1 Brugada pattern in the fourth one (ST segment elevation ≥ 2 mm convex to the top followed by a negative T wave) on V2 lead

Second ECG (November 20) Sinus rhythm.

Left anterior fascicular block: Why?

Because:

- 1) Extreme left axis deviation of QRS axis in the left superior quadrant beyond -30° ($\approx 45^\circ$);
- 2) qR pattern in VL and I (CCW rotation on FP)
- 3) Vector from initial 10 to 20 ms heading below and to the right: initial q wave in VL and I leads
- 4) QRS loop with counterclockwise rotation
- 5) rS pattern in inferior leads with $S_{III} > S_{II}$: this criterion differentiates it from Right End Conduction Delay of the right branch and SI-SII-SIII syndrome, where $S_{II} > S_{III}$; and
- 6) Final s wave in left precordial left leads V5-V6.
- 7) The triphasic qRs pattern in right precordial leads I think that is consequence of LSFB and not by incomplete RBBB.

Brugada pattern disappear.

Conclusion

- 1) Intermittent AF in patient without apparent structural heart disease
- 2) Spontaneous type 1 Brugada pattern (only in fourth beat V2 lead)

3) Intermittent intraventricular dromotropic disturbances: LAFB and LPFB??? Alternating???

All these aspects are suggestive of Brugada syndrome I think

Please I would like some thoughts about this case.

1) Which the age and ethnic of this patient? Caucasian? Asian? or other

2) Between the ECG of November 19 and the ECG of day 20 it had some therapy?

The rhythm change was spontaneous?

Thank in advance.

Andrés R. Pérez Riera