

ECG Contest

Response to ECG, January 2020

Respuesta al ECG de enero de 2020

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The correct answer is number 2: this is flutter of the native atrium, disconnected from the transplanted atrium after cardioversion in a female patient who had undergone a Shumway (biatrial) transplant. The graft also shows sinus dysfunction, with secondary nodal escape (Figure 1). These 2 findings, on their own, are common in transplant recipients,¹ particularly following a biatrial technique.²

Diagnosis was confirmed with a temporary epicardial pacemaker (Figure 2). On atrial pacing at 90 bpm, graft atrial capture was achieved, thereby demonstrating that atrioventricular conduction is normal, and so answer 3 is incorrect. Capture also demonstrated that the flutter was derived from the native atrium because otherwise capture of the transplanted atrium could not be achieved at 90 bpm as the flutter has a higher frequency (answer 1 incorrect). In fact, the flutter continues to be dissociated from atrial pacing, as observed when pacing stopped (answer 4 incorrect).



Figure 1.



Figure 2.

REFERENCES

1. Hamon D, Taleski J, Marmar V, Shivkumar K, Boyle NG. Arrhythmias in the heart transplant patient. *Arrhythm Electrophysiol Rev.* 2014;3:149–155.

2. Grant SC, Khan MA, Faragher EB, et al. Atrial arrhythmias and pacing after orthotopic heart transplantation: bicaval versus standard atrial anastomosis. *Br Heart J.* 1995;74:149–153.

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