

ECG Contest

Response to ECG, July 2019

Respuesta al ECG de julio de 2019

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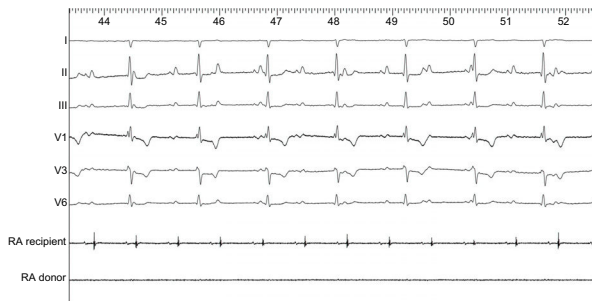


Figure 1.

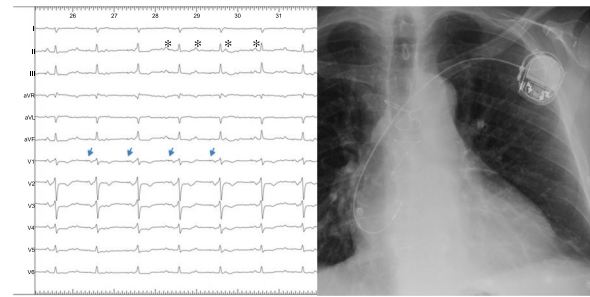


Figure 2.

The correct answer is number 1, sinus dysfunction. In biatrial heart transplant, activity is usually observed in the right atrium (RA) of the donor and recipient.¹ In our ECG, there is only atrial rhythm dissociated from the ventricles, and so responses 3 and 4 can be ruled out. The history of flutter with fast atrial response means response 2 is unlikely. Electrophysiological study confirmed atrial standstill in the RA of the donor, whereas that of the recipient maintained sinus rhythm not conducted to the donor. This situation resembled atrioventricular block (Figure 1). Conduction between the donor RA and the ventricles was confirmed to be satisfactory, and an atrial pacemaker was implanted (Figure 2). Sinus rhythm of the recipient (asterisk) was subsequently observed dissociated from paced atrial rhythm (arrows) and conducted to the ventricles. When evaluating ECGs in these patients, it is essential to consider a diagnosis of sinus dysfunction of the donor RA, whose prevalence ranges from 4% to 40%.²

REFERENCES

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2. Stecker EC, Strelch KR, Chugh SS, Crispell K, McNulty JH. Arrhythmias after orthotopic heart transplantation. *J Card Fail.* 2005;11:464–472.

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