

# Case reports

## Tachycardia of unknown Origin

This is the first published case of onset of tachycardia despite triple rate-controlling medication during a rugby league match. The case highlights the importance of a thorough history to exclude Origin-induced tachycardia.

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### Clinical record

A 40-year-old Queensland man on continuous telemetry for decompensated idiopathic dilated cardiomyopathy following explantation of an infected implantable cardioverter-defibrillator was noted to have abnormal tracing (Box) between 19:00 and 22:00 on 4 July 2012. The patient was well, symptom-free and in excellent spirits. His medication included digoxin 250 µg daily, amiodarone 200 mg daily and bisoprolol 7.5 mg daily, with a resting heart rate of 60 beats per minute.

Telemetry showed asymptomatic variable persistent sinus tachycardia over a 3-hour period on the previous evening.

Further history revealed that the patient had been watching the deciding match of the annual State of Origin rugby league series between Queensland and New South Wales

on television. The Box shows the onset of the tachycardia at the start of the match coverage at 19:00, with a second peak at kick-off (20:15). The recorded rhythm was sinus with left bundle branch block (QRS duration, 140 ms). The sinus tachycardia persisted throughout the first half until the half-time interlude, when normocardia resumed. The tachycardia reoccurred at the start of the second half, reaching a peak in the dying minutes of the game, when the patient's home state, Queensland, scored a field goal at 75 minutes — followed by a missed long-range field goal by the NSW halfback in the final minute of the game — securing victory by one point for Queensland (21:55).

### Discussion

This case illustrates a sustained run of tachycardia in a continuously monitored inpatient with cardiomyopathy, which terminated itself after trying circumstances and which occurred despite multiple rate-limiting medications.

Had the patient's defibrillator still been in place, it mercifully would not have been activated, as his defibrillation threshold was set at 180 beats per minute. Origin-induced tachycardia should be a differential diagnosis for asymptomatic sinus tachycardia in passionate Queensland rugby league supporters, whose only cure when watching televised coverage is to turn off their televisions.

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Cardiac telemetry trace

