A 70-year-old man with atrial fibrillation who was receiving anticoagulation therapy was admitted to the neurology department after a stroke. During his admission, slow ventricular conduction of the atrial fibrillation was observed, and so a single-chamber pacemaker with unipolar pacing in VVIR mode was implanted.

At 2 hours after implantation, episodes of tachyarrhythmia with broad QRS were observed. The ECG shown in the Figure 1 was recorded.

What do you think is the most likely diagnosis?

1. The electrode has impacted the apex and is causing abundant edema with capture failure and ventricular ectopy.
2. Ventricular ectopy is observed due to mechanical pacing of the electrode, which is loose in the right ventricular outflow tract.
3. The increase in circulating catecholamines due to the stroke is causing rapid and aberrant conduction of the underlying atrial fibrillation.
4. The patient probably has significant hyperpotassemia due to acute stroke, with capture failures and secondary ventricular tachycardia.

Submit your answer to http://www.revespcardiol.org/en/electroreto/72/01. The solution will be published in the next issue (February 2019). #ECGChallenge #RetoECG.