

## A New Case of Epsilon Wave on Loop Recorder

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**Received:** 23 May 2016; **Accepted:** 25 May 2016; **Published:** 27 May 2016

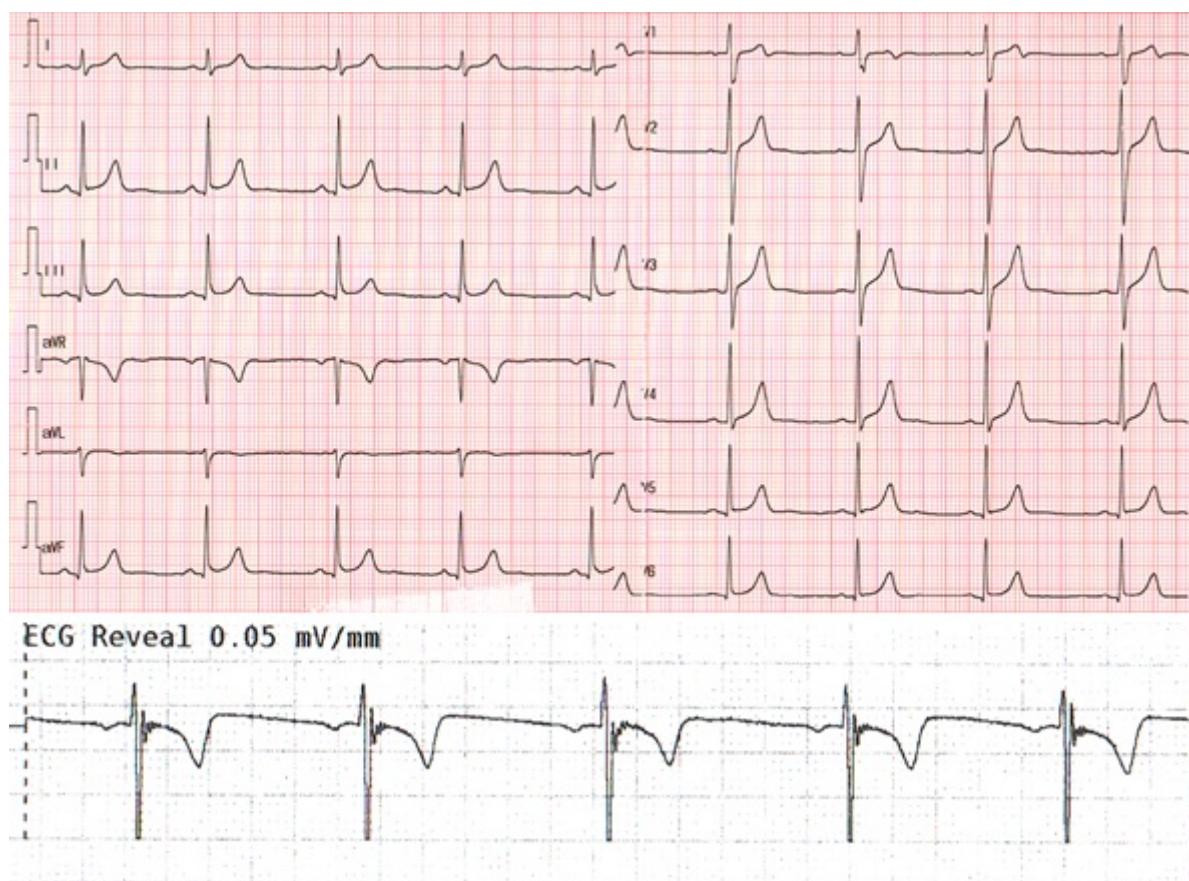
**Citation:** Fontaine GH, Waintraub X, Li G, et al. A New Case of Epsilon Wave on Loop Recorder. Arch Can Res. 2016, 4: 2.

### Image Case

Epsilon wave in ARVD is the marker of slow conduction (parietal block) observed on the right precordial leads as opposed to the left precordials. It is the result of a slowdown of conduction in the epicardial layers of RV and LV apex due the presence of a trouble in development producing apoptosis and fat (Kim Nature 2013) instead of cardiomyocytes [1-3].

However, in the large majority of patients this phenomenon is too weak to produce significant waves on standard ECG recording [4].

Here, we present a new case in which the Epsilon wave is present on the surface ECG but is also observed on the implanted loop recorder giving a confirmation of the previous description (Europace in press) (**Figure 1**).



**Figure 1** Epsilon waves obtained by the recorder is up to 200 ms. On the ECG the Epsilon wave is visible on leads: III, aVF, V1. Also note the reduced amplitude and notch on the second QRS in V1 suggesting an unstable intramyocardial delay of conduction also visible on the third QRS complex of loop recorder.

Finally it is also confirmed that the loop which has an interelectrode distance of 6 cm, is a very sensitive marker of ARVD which could be also obtain with bipolar chest leads called "the Fontaine lead system" [5].

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