**THE ELECTROCARDIOGRAM LACKS SENSITIVITY FOR THE DETECTION OF MYOCARDITIS**

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Background: There are few descriptions of the electrocardiographic (ECG) findings of myocarditis because of an unavailable noninvasive gold standard. Recently, cardiac magnetic resonance imaging (CMR) has been demonstrated to have an accuracy of 68% for the diagnosis of myocarditis (MYOC)1. Mid-wall delayed gadolinium enhancement (MWDGE) is associated with MYOC.

Objectives: We will describe the ECG findings in a consecutive series of 41 patients clinically suspected with severe cardiac disease and with MWDGE on CMR.

Methods: Data were extracted from the available records. ECGs were divided into: Group A: No STT changes, Group B: STT changes but no ST elevation (STE), Group C: STE. Groups A and B were subdivided according to the absence (1) or presence (2) of a QRS abnormality. Group C was subdivided into STE suggestive of pericarditis (1) or myocardial injury (2).

Results: Findings are shown in the table. In 61% patients the ECG was normal or non specific. In only 39% was there STE.

Conclusions: Individuals in this cohort were highly likely to have myocarditis. However, only a minority of these patients had ECG findings important enough to attract the attention of the busy clinician. Thus, it seems likely that many such patients go unrecognized.

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| EKG Class | Number | Age (SD) | Male/Female | LVEF (SD) | Peri Effusion |
| A-1 | 10 | 38.1 (16.5) | 8/2 | 63.7 (8.3) | 2 (20%) |
| A-2 | 5 | 40.8 (12.0) | 4/1 | 52.0 (8.1) | 2 (40%) |
| B-1 | 6 | 40.2 (12.2) | 4/2 | 50.8 (6.8 | 2 (33%) |
| B-2 | 4 | 56.0 (10.4) | 3/1 | 38.5 (8.5) | 0 |
| C-1 | 6 | 36.5 (20.6) | 5/1 | 47.7 (10.4) | 3 (50%) |
| C-2 | 10 | 31.5 (13.8) | 9/1 | 58.6 (6.0) | 4 ( 40%) |
| Total | 41 | 38.6 (15.6) | 33/8 | 54.3 (10.8) | 13 (32%) |