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and 44% had a PPM. The primary implant indication was prevention of SCD in 50%, sick sinus syndrome in 37.5%, and AV nodal disease in 12.5%. Baseline NYHA class was 2.8 ± 0.4 . Baseline peak resting and provokable LVOT gradients were 48 ± 42 mmHg and 86 ± 47 mmHg, respectively. The final paced AV delay was 113 ± 27 ms. Mean follow-up was 2.0 ± 1.3 years. Success by NYHA class was achieved in 75% and echocardiographic success was achieved in 75%, with a 63% overlap. NYHA class significantly improved to 1.7 ± 0.5 ($P < 0.001$). Final peak resting and provokable LVOT gradients improved to 22 ± 38 mmHg ($P = 0.186$) and 67 ± 60 mmHg ($P = 0.232$), respectively.

Conclusion: In symptomatic HOCM patients with an ICD or PPM implanted for indications unrelated to relief of LVOTO, CDT with as-needed echocardiographic optimization frequently improves both functional status and echocardiographic LVOT gradients. Opportunistic CDT utilizing existing pacing systems should be considered in all HOCM patients with symptomatic LVOTO.

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INTERPRETATION OF PRONE-POSITION 12-LEAD SURFACE ELECTROCARDIOGRAM AND MAIN DIFFERENCES WHEN COMPARED TO SUPINE-POSITION ECGS: INSIGHTS FROM A CASE-CONTROL STUDY

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Background: Prone position is a valuable treatment strategy in acute respiratory distress syndrome (ARDS) and is frequently used in surgical scenarios. Nonetheless, prone position may hinder proper acquisition and interpretation of the 12-lead electrocardiogram (ECG) as there is a sparsity of data regarding standardization of lead position and interpretation.

Objective: We aimed to analyze and compare ECGs in the supine and prone positions to provide guidance for adequate interpretation and clinical utility of the ECG in prone position.

Methods: This was a multicenter prospective cohort study in which ECGs in the prone and supine position were compared, including patients with COVID-19 infection and healthy controls. The precordial leads for the prone ECGs were placed in the following fashion: V1 in the right paraspinal region at the level of the T7 vertebra, V2 in the left paraspinal region at the level of the T7 vertebra, V4 in the mid-scapular region at the level of the T8 vertebra (approximately below the tip of the scapula), V3 halfway between V3 and V4, V5 at the posterior axillary line at the level of the T8 vertebra, and V6 at the mid-axillary line at the level of T8 vertebra - same position as the V6 in the supine position.

Results: A total of 45 patients with COVID-19 infection were compared with 40 healthy volunteers (48% of the patients were female, the mean age in the entire cohort was 48.8 years, and the mean BMI was 27.9). The mean heart rate, PR interval, QRS duration, QT and QTc interval, and QRS axis in the frontal plane were found to positively correlate in supine and prone ECGs. The main difference found was no correlation of the QRS amplitude between supine and prone ECGs in leads V1, V2, V3, and V4; but there was positive correlation in leads V5 and V6. Prominent Q waves were present in the anteroseptal leads (V1-V3) in the prone posterior position. In addition, T-wave inversions or flattening were observed in leads V1 and V2 were present in a majority of patients in the prone posterior position.

Conclusion: ECGs performed in the prone position are an acceptable alternative to supine ECGs. Special attention and review of prior supine ECGs may be necessary for precise interpretation of the anteroseptal precordial leads which may be misleading (i.e., septal infarct).

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OUTCOMES IN PATIENTS WITH COVID-19 INFECTION AND T-WAVE INVERSIONS: A PROPENSITY SCORE-MATCHED ANALYSIS

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Background: Different patterns of cardiac involvement have been described in patients with COVID-19 infection, including myocarditis, ST-elevations, T-wave inversions (TWI), elevated troponins, and sudden cardiac death.

Objective: We aimed to compare outcomes of patients admitted with COVID-19 and presenting with TWI to patients without this ECG finding.

Methods: A propensity score-matched analysis using a retrospective database of patients admitted with COVID-19 at an urban medical center from March 2020 to June 2020 was performed to assess outcomes in patients with new TWI compared to controls without new TWI. Patients were matched based on baseline comorbidities.

Results: 2681 patients with COVID-19 infection were included in our analysis, 164 with new TWI and 2517 with no TWI. A 1:1 PSM matching was performed and yielded 159 patients in each group. TWIs were associated with a higher incidence of intubation and mechanical ventilation (31.1% vs 20.1%, HR 1.676, $p = 0.001$). Moreover, patients with TWI were more likely to require vasopressors (27.4% vs 18.2%, $p = 0.003$), and the average length of hospital stay was noted to be longer in patients with TWI (8.5 days vs 5 days in patients without TWI). However, there was no difference in mortality in the presence of TWI (HR = 1.102, $p = 0.64$).

Conclusion: Our study demonstrates that new TWIs were associated with higher rates of mechanical ventilation and vasopressor utilization in patients with COVID-19 infection. However, this finding is not associated with significantly increased mortality compared to controls without this new ECG finding. Further studies are needed to complement these findings.

