**EARLY REPOLARIZATION SEEN ON ECG IS INDEPENDENTLY ASSOCIATED WITH AFRICAN AMERICAN RACE, AGE <30, BMI >25 AND HEART RATE < 70 BPM**

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Background: Early repolarization is commonly seen in young adults and has been suggested to have correlation with sudden death. The goal of this study was to evaluate association between early repolarization (ER) with gender, race and other baseline characteristics.

Method: The Anthony Bates Foundation has been performing screening echocardiography and ECG in high schools across the United States for the prevention of sudden death since 2001. A total of 636 subjects were available with documented ECG. Results: We found a prevalence of 13.5% of ER in our study population. The age of the subjects with documented ER was 7-57 years old with a mean of 20 and median of 19 year. The prevalence of ER was higher in African American participant (48.0 vs 10.8%, OR 5.9, CI 3.5 -9.7, p<0.0001). Subject with BMI > 25 had higher prevalence of ER (18.6 vs. 11.7%, p=0.02). Age < 30 had much higher prevalence of ER (16.4 vs 2.0%, p<0.0001). Male had higher prevalence of ER (17.1% vs. 8.3%, p=0.001). Finally heart rate < 70 at rest correlated with higher prevalence of ER (18.2% vs. 9.2%, p=0.001). Using multivariate analysis, except gender, all other parameters remained significantly correlating with ER with strongest being African American race.

Conclusion: The prevalence of ER is independently associated with African American race, heart rate < 70, Age < 30 and BMI >35. African American race has highest correlation with ER.