PREDICTION OF CORONARY ARTERY DISEASE AMONG ADULT CONGENITAL HEART DISEASE PATIENTS USING FRAMINGHAM RISK SCORE

Poster Contributions
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Authors: Joshua R. Thomas, Nasir Mushtaq, Angela Yetman, Mark Fox, Primary Children’s Medical Center, University of Utah School of Medicine, Salt Lake City, UT, USA, University of Oklahoma School of Community Medicine, Tulsa, OK, USA

Background: Risk assessment tools to predict coronary artery disease (CAD), such as the Framingham Risk Score (FRS), have been developed to assess various populations. The FRS evaluates cardiovascular (CV) risk factors including age, gender, BP, smoking status, diabetes, and lipid profile. The CAD risk among adults with congenital heart disease (ACHD) is currently unknown.

Methods: We assessed CAD risk among ACHD clinic patients. Cross-sectional analysis of data was performed. We evaluated the distribution of 10-year risk of CAD as a categorical variable and continuous variable. Ten-year risk of CAD was categorized into three categories (<10%, 10% to 20%, and >20%) and its distribution was examined with gender and age by Fisher's exact test. For the continuous variable, analysis of variance and student's t-test were conducted to examine differences in mean CAD risk across gender and age.

Results: Two-hundred and ten patients (41% Female) with a mean age of 34 (19-74) years were identified. The mean 10-year CAD risk for males was 4.64 (+/-3.99) and for females 2.39 (+/-3.18), with statistically significant differences among age and gender (Table 1). In contrast to previously reported data for the general population, there was an increase in the proportion of patients in the >10% risk categories among the ACHD patient population.

Discussion: Patients in the ACHD population are at a significant risk of CAD. The CV risk factors assessed in the FRS should be evaluated and positively modified among ACHD patients.