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Abstract 20: Correlation Between Body Mass Index and Coronary Calcium score By Coronary Computed Tomography In Patients Age 65 And Below In A Large, Multi- physician Outpatient Cardiology Private Practice

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Introduction: Cardiovascular (CV) disease remains the most common cause of mortality in United States of America. Obesity has been associated with higher risk of coronary artery disease (CAD) in the general population. Majority of CAD data is from academic institutions even though significant number of patients see cardiologists in the private setting. We analyzed coronary computed tomographic angiogram (CCTA) results in patients ages 65 and below from an outpatient cardiology practice to determine calcium scores in relation to their body mass index (BMI).

Methods: We analyzed 719 consecutive ambulatory outpatients ages 65 and below that underwent CCTA from January 2015 to December 2016 for evaluation of CAD using a 64 detector CTA. Patients were broken down into groups based on their BMI (25 and below, 26-30, 31-35, 36-40, > 40).

Results: As seen in the table, the first two groups (BMI 25 and below and BMI 26-30) had the lowest calcium scores. However, there was no correlation between BMI and calcium scores in the last 3 groups. The BMI 31-35 group had higher CCS compared to the two groups with higher BMIs.

Conclusions: In patients with BMI 30 or lower, CCS was the lowest. CCS was highest in the group with BMI between 31-35. Coronary calcium score does not correlate with BMI once the BMI is greater than 35.

BMI	CCS Average	Number of Patients
25 and below	122.1	151 (21.0%)
26-30	140.8	216 (30.0%)
31-35	194.8	198 (27.5%)
36-40	168.0	79 (11.0%)
>40	170.1	75 (10.4%)
Avg: 31.6	Avg: 157.8	Total: 719