



2019- A-38- SCCT

Abstract 21: Probability Of Finding Significant Obstructive Coronary Artery Disease By Coronary Ct Angiography In Male vs Female Patients Presenting with Chest Pain In A Large, Multi-physician Outpatient Cardiology Private Practice



Yesh Dhruva (High School)¹, Ronak Agarwal (High School)¹, Ayushi Agarwal (High School)¹, Saachi Singal (High School)², Mayank Agarwal (M.D)³, Rajiv Agarwal (M.D)⁴

¹ Clements High School, SUGAR LAND, TX, USA

² Katy Taylor High School, Katy, TX, USA

³ UTMB Medical School, Galveston, TX, USA

⁴ Vital Heart & Vein, Humble, TX, USA

Introduction: Cardiovascular (CV) disease remains the most common cause of mortality in United States of America. Chest pain is typically the most common symptom associated with coronary artery disease (CAD) in the general population. Many patients present to emergency departments with chest pain, leading to vast costs in the medical system. 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 males and females ages 65 and below presenting with chest pain from an outpatient cardiology practice to determine probability of obstructive CAD.

Methods: We analyzed 491 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 based on their gender (male or female). Coronary artery stenoses were assigned: none (0%), non-obstructive (< 50%), and obstructive (> 50%).

Results: As noted in the table, males were more likely than females to have non-obstructive CAD (48.3% vs 26.8%) and obstructive CAD (8.5% vs 1.1%). Overall, males were twice as likely (56.9% vs 27.9%) to have any degree of CAD (> 0% stenosis).

Conclusions: In patients presenting with chest pain and undergoing CCTA, males were significantly more likely to have non-obstructive CAD, obstructive CAD, and any degree of CAD.

	0%	<50%	>50%	>0%	Total
Male	91 (43.1%)	102 (48.3%)	18 (8.5%)	120 (56.9%)	211 (43%)
Female	202 (72.1%)	75 (26.8%)	3 (1.1%)	78 (27.9%)	280 (57%)
Total	293 (59.7%)	177 (36%)	21 (4.3%)	198 (40.3%)	491

<https://doi.org/10.1016/j.jcct.2018.12.025>

Available online 05 January 2019

1934-5925/ © 2019 Published by Elsevier Inc. on behalf of Society of Cardiovascular Computed Tomography