CORONARY ARTERY ECTASIA DIAGNOSED BY MULTISLICE COMPUTED TOMOGRAPHY: PREVALENCE, DEMOGRAPHIC DATA AND CLINICAL CHARACTERISTICS

Mostafa Mohamed Nawar, Salah Mohamed El Tahan, Ahmed Mokhtar Abd El Azeem, Mohamoud Ahmed Nour

Department of Cardiology and Angiology, Faculty of Medicine, Alexandria University

INTRODUCTION

Dilatation of an arterial segment to a diameter at least 1.5 times that of the adjacent normal coronary artery is known as coronary artery ectasia, also known as aneurysmal coronary artery disease. Regarding its aetiology, clinical manifestations, and treatment, CAE has confused doctors since the time Morgagni first identified it in 1761. Atherosclerosis is the most frequent cause of coronary artery ectasia, however it can also be caused by other conditions such as Kawasaki disease, viral septic emboli, connective tissue disease and arteritis.

AIM OF THE WORK

The aim of the present study was to estimate the prevalence of coronary artery ectasia in patients who underwent coronary computed tomography International Cardiac Centre in Alexandria and their clinical characteristics.

PATIENT AND METHODS

The Prevalence of CAE was 1.7%, predominantly male are most commonly affected. Hypertension has an effect of developing CAE while Diabetic mellitus is inverse to that.

Our data revealed that 62% of CAE were situated on RCA, 52% on LAD, 22% on CX, and one aneurysm was placed on LM. CTCA detected intraluminal thrombi in 2% of the patients. Our dataset, we found that, those with CAE had noticeably more CACS in comparison to those without CAE.

RESULTS

Table: Distribution of the studied cases according to CTA in group I (n=50)

CTA	No.	%
Vessels affected		
RCA	32	64.0
LAD	26	52.0
LCX	11	22.0
LM	1	2.0
Distribution of artery segments		
Proximal	29	58.0
Diffuse	15	30.0
Distal	4	8.0
M. segment	5	10.0
Single/Multiple		
Single	36	72.0
Multiple	14	28.0
Generalized or localized aneurysms		
Generalized aneurysms	14	28.0
Localized aneurysm	36	72.0
Max diameter (mm)	(n=4)	
Min. – Max.	6.0 – 17.0	
Mean \pm SD.	12.75 ± 4.72	
Median	14.0	
Thrombi		
No	49	98.0
Yes	1	2.0

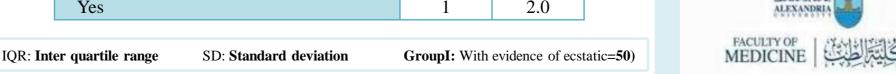




Figure: Multi slice CT angiogram from ICC

CONCLUSION

- In our study the prevalence of coronary artery ectasia is 1.7% with the RCA being the most commonly affected vessel.
- Hypertension is significantly a risk factor for CAE
- CACS was significantly higher in CAE patients compared to patients having no ectasia.



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