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Session 1120 - Nuclear Cardiology: Myocardial Perfusion Imaging

1120-325 / 325 - Comparison of Coronary Flow Reserve in Normal Perfusion Patients With and Without Coronary Risk Factors Using Cadmium Zinc Telluride Based Gamma Camera

March 10, 2018, 10:00 AM - 10:45 AM | Poster Hall_Hall A/B

Authors

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Abstract

Background:

Coronary Flow Reserve (CFR) obtained with positron emission tomography has additional prognosis information even in patients with normal perfusion stress test and can restratify for future risk of events. New Cadmium Zinc Telluride Gamma Cameras (CZT-Spect) allows CFR evaluation but there is still small clinical data about it. The aim of this study was to compare CFR in patients with or without risk factors and normal perfusion stress test using a CZT-Spect.

Methods:

106 Patients were referred for gated spect perfusion stress test and coronary flow assessment by D-SPECT. CFR was obtained by stress flow / rest flow ratio with 4DM software. Perfusion images were analyzed visually and with database. 63 normal perfusion patients were included and classified in 3 groups for the analysis. Group A= non-diabetic, non-smoking and non-dyslipidemia patients
Group B= non-diabetic but smoking and or dyslipidemia patients Group C= diabetic patients

Results:

63 patients (39 men) with a median age of 69 years (interquartile range [IQR]: 59, 78). Median CFR between groups was different according the cardiac risk profile (Graphic). Group A CFR was statistically higher than B and C groups (2.58 vs 2.18 vs 2.05) p<0.05

Conclusion:

CZT-SPECT CFR in normal perfusion patients varies according
different cardiac risk profiles and probably reflects microvascular dysfunction and or multivessel disease.