

**P616 / #466, TOPIC: AS04 CLINICAL VASCULAR DISEASE / AS04.15 OTHER. THE ASSOCIATION OF SYNTAX SCORE WITH FUNCTIONAL SIGNIFICANCE OF CORONARY STENOTIC LESIONS IN PATIENTS WITH STABLE CORONARY ARTERY DISEASE**

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**Background and Aims:** To study the association of SYNTAX score with functional significance of stenotic coronary lesions in patients with stable coronary artery disease (CAD).

**Methods:** The study consecutively enrolled 68 patients with stable CAD (mean age (63±8,0) years; 45 (66 %) males) and angiographically intermediate coronary lesions (diameter stenosis 50-90 %). The stenotic range 70-90 % was considered a «severe» coronary stenosis (SCS) (n=46 [68 %]). The overall CAD complexity was evaluated by SYNTAX score. Functional significance of coronary lesions was assessed by fractional flow reserve (FFR). Forty (59 %) patients presented with at least one functionally significant coronary lesion (FFR ≤0,80). We stratified the enrolled sample in a binary manner according to several FFR cut-offs (from ≤0,80 to ≤0,60, with 0,05 decrement).

**Results:** The SCS was strongly associated with all but one (≤0,60) of the selected FFR cut-offs (≤0,80: OR 10,82 (95 % CI 3,67-31,87) (p<0,001); ≤0,75: OR 9,29 (95 CI 3,20-27,01) (p<0,001); ≤0,70: OR 5,47 (95 CI 1,84-16,31) (p=0,002); and ≤0,65: all the FFR ≤0,65 patients presented with SCS; all the AUCs for logistic regression models were ≥0,8). The SYNTAX score was strongly associated with FFR ≤0,70 (OR 1,26 (95 % CI 1,06-1,49); p=0,009) and ≤0,65 (OR 1,21 (95 CI 1,03-1,43); p=0,023). Additionally, SYNTAX score was the only factor, (moderately) associated with FFR ≤0,60 (OR 1,23 (95 % CI 1,04-1,47); p=0,017) (0,8>AUC≥0,7).

**Conclusions:** The SYNTAX score was associated with more functionally affected (FFR ≤0,70) stenotic coronary lesions in patients with stable CAD, thus should be considered as an additional factor favoring revascularization.

**P617 / #1529, TOPIC: AS04 CLINICAL VASCULAR DISEASE / AS04.15 OTHER. INTRACARDIAC HEMODYNAMICS AND HEART RATE VARIABILITY IN STABLE CORONARY ARTERY DISEASE PATIENTS WITH CONCOMITANT COVID-19**

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**Background and Aims:** To study the intracardiac hemodynamics (IH) and heart rate variability (HRV) in stable coronary artery disease (SCAD) patients with concomitant COVID-19.

**Methods:** The cross-sectional study analyzed clinical and instrumental data from the sample of 80 patients, being subdivided into three groups: group 1 (G1) – SCAD without COVID-19 (n=30; average age 62±14 ys; males – 18 [60 %]); group 2 (G2) – SCAD with concomitant COVID-19 (n=25; 62±11 ys; males – 21 [84 %]); group 3 (G3) – COVID-19 without SCAD (n=25; 52±19 ys; males – 21 [80 %]). The control group included 30 relatively healthy volunteers (47±15 ys; males – 23 [77 %]).

**Results:** The changes of IH and HRV in G2 were characterized by the impaired left ventricular (LV) systolic and diastolic function, dilation of both ventricles and elevated systolic pulmonary artery pressure. LV end-diastolic volume was higher in G2 (205±21 ml), in comparison to G1 (176±33 ml; p<0,001) and G3 (130±21 ml; p<0,001). G1-3 patients, as compared to controls, presented with the decrease of the overall HRV (by SDNN, SDANN and SDNNi) and parasympathetic activity (by rMSSD, pNN50 and HF), along with the increase of QT interval duration and its variability. G2 demonstrated the most advanced changes of HRV (by SDNN and pNN50) and both QT interval characteristics.

**Conclusions:** SCAD patients with concomitant COVID-19, along with both ventricles dilation and IH impairment, presented with the signs of autonomic dysfunction and the increase of QT interval duration and its variability. HRV and QT interval characteristics should be additionally considered while the management of such patients.

**P618 / #1188, TOPIC: AS04 CLINICAL VASCULAR DISEASE / AS04.15 OTHER. THE ASSOCIATION OF SARC-F SCORE WITH ATHEROSCLEROSIS IN ELDERLY RESIDENTS OF CARE HOMES**

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**Background and Aims:** Ischemic Heart Disease, Cerebrovascular Disease and Peripheral Arterial Disease are the leading atherosclerosis-related diseases and the main admission-associated conditions in Residential Care and Nursing Homes. The SARC-F questionnaire is a simple and reproducible screening tool for low physical performance. In this cross-sectional study, the physical performance of elder Care Homes' residents in association with atherosclerosis-related diseases was assessed.

**Methods:** 389 elderly (older than 60 y.o.) residents of Care Homes were recruited. Health records of all participants were analysed for the presence of established atherosclerosis-related conditions, including Ischemic Heart Disease, Cerebrovascular Disease and Peripheral Arterial Disease. For physical performance evaluation, the SARC-F questionnaire was used.

**Results:** 54% (211) residents were diagnosed with atherosclerosis-related diseases. The mean SARC-F score of atherosclerotic residents was reliably higher compared to participants without atherosclerosis-related diseases (5.27±0.18 vs. 4.61±0.25, p-value=0.005). The prevalence of atherosclerosis was significantly higher among residents with SARC-F ≥ 4 (low physical performance threshold) (60.2% vs. 37.0%, p-value=0.000). In addition, the prevalence of low physical performance was also significantly higher among residents with atherosclerosis-related diseases (85.5% vs. 64.6%, p-value=0.000). The Tau-b Kendall correlation revealed the low positive relationship between atherosclerosis-related diseases and SARC-F score (r=0.086, p-value=0.049).

**Conclusions:** The atherosclerosis-related diseases are associated with higher rates of low physical performance among elderly residents of Care Homes.

**P619 / #926, TOPIC: AS04 CLINICAL VASCULAR DISEASE / AS04.15 OTHER. INTERLEUKIN-33 RELATIONS WITH DECREASED ANKLE-BRACHIAL INDEX IN OBESE PATIENTS WITH CORONARY ARTERY DISEASE**

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