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COMPARISON OF DIFFUSE WITH FOCAL CORONARY ARTERY SPASM IN PATIENTS WITH VASOSPASTIC ANGINA ON 3-YEAR CLINICAL OUTCOMES

Oral Contributions
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Background: Coronary artery spasm (CAS) is a major cause of myocardial ischemia. However, the incidence and clinical prognosis of diffuse CAS has not been reported. We compared diffuse with focal CAS in patients (pts) with vasospastic angina based on 3-year clinical outcomes.

Methods: A total of 2,797 consecutive pts without significant coronary artery disease who underwent Acetylcholine (ACh) test were enrolled. Patients were divided into three groups according to Ach test results and narrowing length (CAS negative; n=1,188, Diffuse CAS, ≥ 20; n=1,344, Focal CAS, < 20mm; n=265).

Results: At baseline, there were no differences between diffuse and focal groups. Angiographically, the diffuse group showed more multi-vessel spasm (39.2% vs 10.1%, p<0.01) and ECG changes (6.7 vs 3.3%. p=0.03), whereas the focal group showed more myocardial bridges (24.3 vs 40.8%, p<0.01). 3-year clinical outcomes including mortality, cardio & cerebro-vascular disease and recurrent chest pain were similar between the two groups. When respectively compared with CAS negative group, only diffuse CAS was shown to be an independent predictor of recurrent chest pain (6.7% vs 3.7%, p<0.01), even after adjustment using propensity score matching (OR; 1.63, 95% C.I; 1.08-2.46).

Conclusions: In this study, diffuse CAS was associated with adverse 3-year clinical outcomes. Therefore, intensive anti-anginal management and close clinical follow up would be needed for pts who show diffuse CAS during Ach test.

Figure. Recurrent-chest pain on 3-year cumulative clinical outcomes.