

## P1787

## Pharmacologic stress test: still an important prognostic factor? a follow-up study

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**Introduction:** Dobutamine stress echocardiography (DSE) is an established exam for evaluation of extent and severity of coronary artery disease.

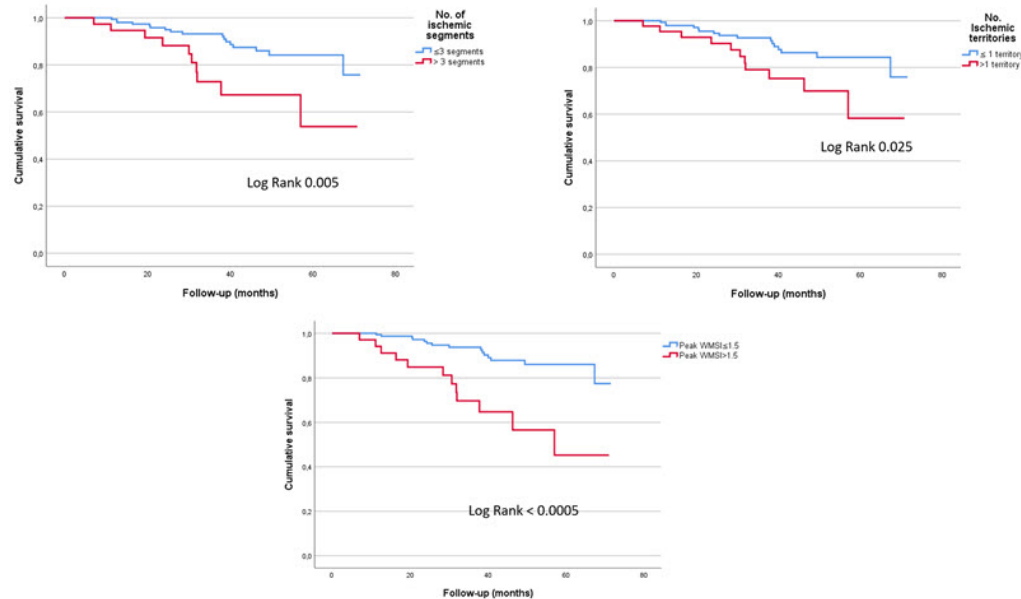
**Purpose:** To analyse the results and complications of DSE and identify prognostic predictors in patients (P) who underwent DSE for myocardial ischemia detection.

**Methods:** 220P who underwent consecutive DSE from 2013 to 2017. P with significant valvular disease were excluded. Clinical data, echocardiographic parameters and data from follow up (FU) regarding all-cause mortality and MACEs were analysed. Mean age  $64.8 \pm 12.0$  years(Y), 143 men (65%).

**Results:** 88P (40%) had positive, 102 had negative and 30 had inconclusive DSE; complications rate of 15%. Prevalence of hypertension, diabetes mellitus (DM), dyslipidemia, prior MI, percutaneous coronary intervention (PCI), coronary arterial bypass graft (CABG) and HF was 82.7%, 42.3%, 67.7%, 35.9%, 31.8%, 10.9% and 9.5%, respectively. Mean left ventricular endsystolic (LVSD) and enddiastolic dimensions were  $33.7 \pm 8.9$  and  $52.8 \pm 7.1$  mm. Mean resting wall motion score index (rWMSI) and peak (pWMSI) were  $1.16 \pm 0.28$  and  $1.24 \pm 0.34$ . Mean resting GLS (rGLS) and peak GLS (pGLS) were  $-16.3 \pm 4.3$  and  $-16.6 \pm 4.3$ . Mean no. of ischemic segments was  $1.7 \pm 2.4$  and 16.8% had ischemia >3 segments. There was ischemia in left anterior descending (LAD) coronary in 53P and in circumflex and right coronary territories in 18 and 68P. 22.6% had more than one ischemic territory. 43P (49.4%) underwent intervention, 38 with PCI and 5 with CABG. During a mean FU of  $38.8 \pm 16.8$  months, 47 MACEs were observed, including 32 deaths (14.5%). Positive DSE ( $p = 0.012$ ), no. of ischemic segments ( $p = 0.019$ ), ischemia in the LAD ( $p = 0.003$ ), rGLS ( $p = 0.038$ ) and pGLS ( $p = 0.038$ ) were related to the occurrence of MACEs. In Cox regression analysis, age ( $p = 0.005$ ), DM ( $p = 0.005$ ), HF ( $p = 0.006$ ), prior CABG ( $p = 0.015$ ), LVSD ( $p = 0.026$ ), rWMSI ( $p = 0.029$ ), pWMSI ( $p = 0.013$ ) and pGLS ( $p = 0.038$ ) were associated with increased all-cause mortality. Kaplan–Meier survival analysis showed that survival was significantly worse for ischemia > 3 segments (log rank 0.005), ischemia of more than one territory (log rank 0.025) and pWMSI > 1.5 (log rank < 0.0005). With multivariate Cox regression analysis, age >65Y (HR 4.22,  $p = 0.004$ ), DM (HR 2.49,  $p = 0.038$ ) and pWMSI > 1.5 (HR 9.73,  $p = 0.007$ ) were independently associated with all-cause mortality.

**Conclusion:** In patients who underwent DSE there were some baseline and DSE-related independent predictors of long-term prognosis: age, DM and peak WMSI.

Abstract P1787 Figure. Kaplan–Meier curves



**Fig. 1** – Kaplan–Meier curves for long term survival in patients stratified according to the no. of ischemic segments, no. of ischemic territories and peak WMSI >1.5.