Prognostic value of pharmacologic stress echocardiography in diabetic and nondiabetic chest pain patients with intermediate-to-high threshold positive exercise electrocardiography L. Cortigiani<sup>1</sup>, R. Bigi<sup>2</sup>, R. Sicari<sup>3</sup>, F. Rigo<sup>4</sup>, F. Bovenzi<sup>2</sup>, E. Picano<sup>1</sup>

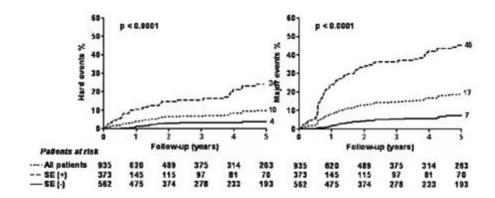
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**Aims:** To compare the prognostic value of pharmacologic stress echocardiography in diabetic and nondiabetic patients with chest pain and intermediate-to-high threshold positive exercise electrocardiography.

**Materials and methods:** 935 chest pain patients (131 diabetics) with ST-segment depression  $\geq 1$  mm on exercise electrocardiography at  $\geq 75$  watt workload underwent dipyridamole (n=786) or dobutamine (n=149) stress echocardiography and were followed-up for the occurence of hard (death, infarction) and major events (death, infarction, late revascularization).

**Results:** During a median follow-up of 26 months, 158 events (51 deaths, 28 myocardial infarctions, and 79 late revascularizations) occurred: 34 in diabetics and 124 in nondiabetics (see Figure). Independent predictors of hard events were age, diabetes, and ischemia at stress echo. 5-year hard event rate was 24 % in patients with and 4 % in those without ischemia (p<0.0001). Independent predictors of major events were age, diabetes, hypercholesterolemia, smoking habit, antianginal therapy at the time of testing, and ischemia at stress echo. 5-year major event rate was 46 % in patients with and 7 % in those without ischemia (p<0.0001).

**Conclusions:** Stress echocardiography is effective in risk stratifying diabetics and nondiabetics with intermediate-to-high threshold ischemic exercise electrocardiography. However, major event rate associated with a non ischemic test is similar in diabetics and nondiabetics during the first year of follow-up, and markedly increased in the former thereafter.



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