

OBJECTIVES

Pharmacologic cardiac stress SPECT (PS-SPECT) is one of the older and most frequently used non-invasive tests for evaluation and risk stratification of patients with suspected chronic ischemic heart disease (IHD) unable to exercise. The objective of the study was to identify the variables related to prognosis in those patients.

METHODS

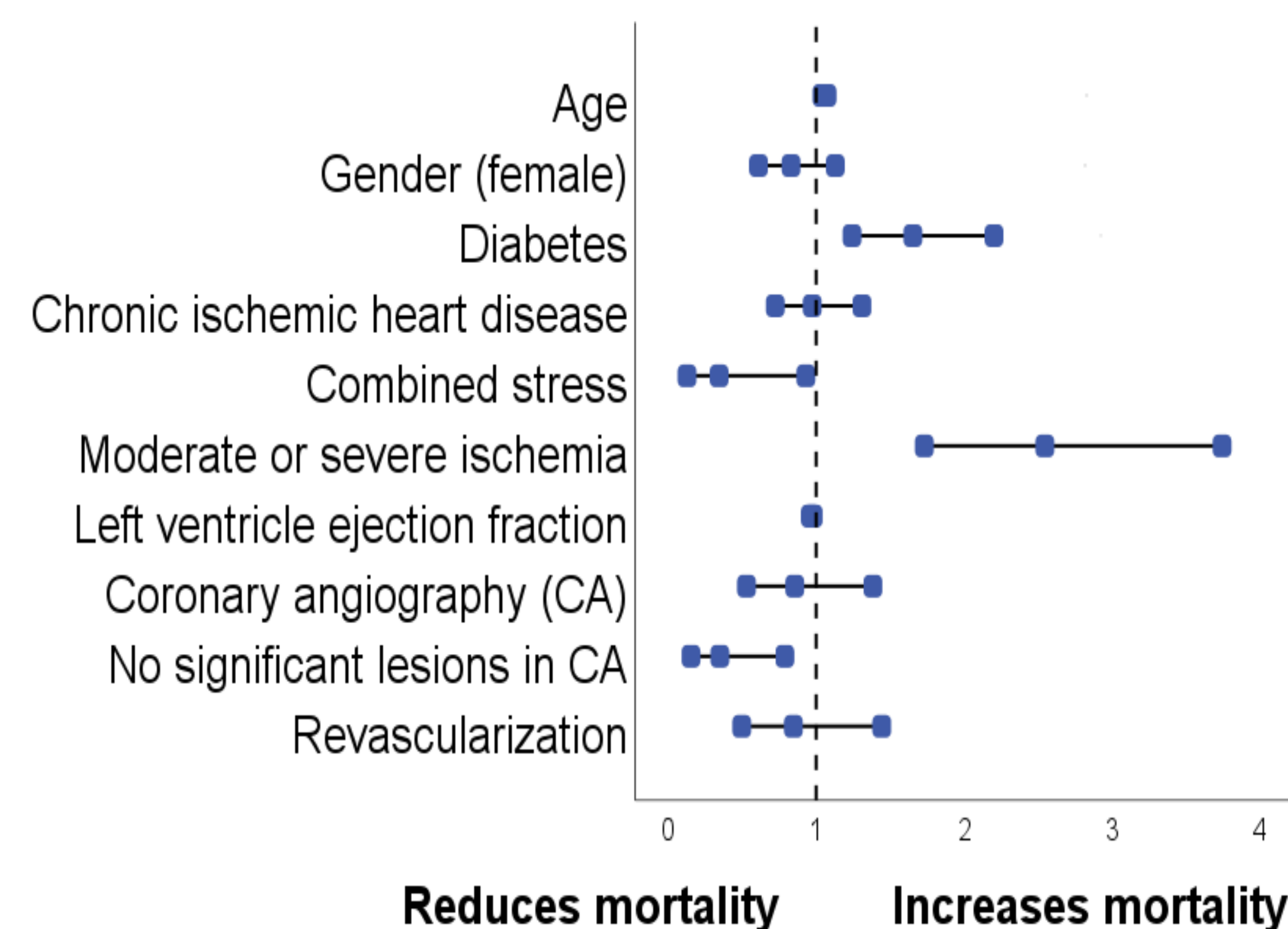
Retrospective study of 1.214 patients referred for PS-SPECT between 2010 and 2016 who completed a median follow-up of 3 years.

Baseline characteristics		Chronic IHD	38%
Age (years)	74±10	Peripheral artery disease	44%
Women	56%	Dipyridamole	89%
Diabetes	51%	Dobutamine	7%
Hypertension	86%	Dipyridamole + low intensity exercise	4%
Hypercholesterolemia	60%		

Declaration of interest: Nothing to declare

RESULTS

Global mortality was high at 1 year (5.5%) and at long-term follow-up (26.5%). Variables identified as independently related to mortality were age, diabetes and moderate or severe ischemia in the PS-SPECT. Preserved EF, angiography without significant lesions and use of combined stress dipyridamole + exercise were identified as protective factors, but coronary angiography or revascularization were not.



	OR	IC 95%	p
Age	1.055	1.038-1.072	<0.001
Gender (woman)	0.830	0.610-1.129	0.236
Diabetes	1.765	1.326-2.326	<0.001
Known. Isc heart disease	0.973	0.723-1.309	0.854
Combined stress	0.344	0.127-0.930	0.035
Mod or severe ischemia	2.545	1.730-3.742	<0.001
Left ventricle EF	0.970	0.960-0.980	<0.001
Coronary angiography	0.855	0.529-1.383	0.523
No significant lesions	0.349	0.154-0.788	0.011
Revascularization	0.846	0.497-1.443	0.540

CONCLUSIONS

Patients selected for PS-SPECT in our hospital are a high-risk population with high mortality. Variables related to worse prognosis depended on clinical characteristics (age, diabetes, and impossibility to exercise even at a low intensity grade) and results of the PS-SPECT. Identification of significant ischemia by PS-SPECT was related to a 2.5 increased long-term mortality. Preserved EF measured by gated SPECT was, on the contrary, a protective factor.