

Journal reading

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99/03/15

Journal reading

- A new simple risk score in patients with acute chest pain without existing known coronary disease
 - Alberto Conti MDa,□, Simone Vanni MDb, Beatrice Del Taglia MDa,
 - Barbara Paladini MDb, Simone Magazzini MDb, Stefano Grifoni MDb,
 - Carlo Nozzoli MDa, Gian Franco Gensini MDc
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Introduction

- Patients with chest pain (CP) and nondiagnostic initial work-up, including electrocardiogram (ECGs) and serial troponins, and without existing known coronary artery disease are currently considered at low risk of short-term coronary events
- No usefulness of a prediction rule including coronary risk factors in patients with low-risk CP

Introduction

- Hypertension, hypercholesterolemia, obesity, cigarette smoking, family history
- Metabolic syndrome (MS), diabetes mellitus (DM)
- Clinical prediction rule for prognostication in patients with low-risk CP

Method

Table 1 Chest pain score

Location	
Substernal, precordial	+3
Left chest, neck, lower jaw, epigastrium	+1
Radiation	
Either arm, shoulder, back, neck, lower jaw	+1
Character	
Crushing, pressing, heaviness	+3
Sticking, pleuritic, pinprick	+1
Associated symptoms	
Dyspnea, nausea, diaphoresis	+2
Previous history of CP	+3

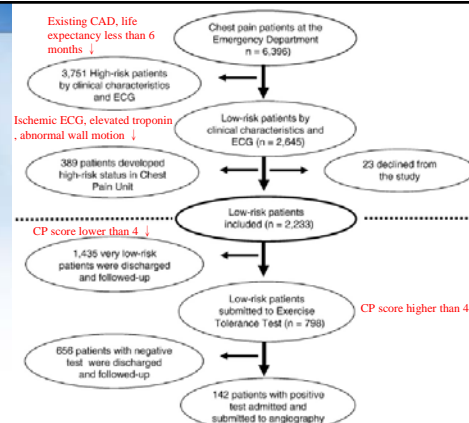


Fig. 1 Flow diagram of participants in the study.

End point

- Cardiovascular death
- Nonfatal myocardial infarction, or new or recurrent severe cardiac ischemia requiring urgent revascularization

Statistical analysis

- Factor of 3 for CP score higher than 6
- A factor of 1 for each of male sex, age older than 50 years, MS, and DM

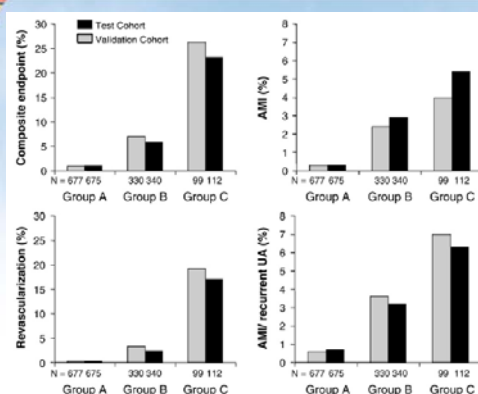
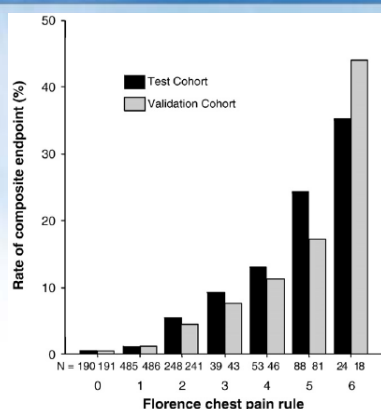
Result

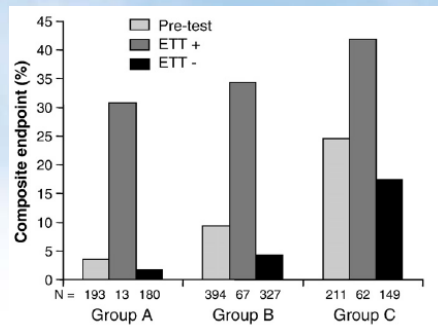
- At 6-month follow-up, no patient was lost to follow-up and no patient died; 108 patients (4.8%) reached the composite end point

Table 3 Association between clinical variables and composite end point (death and/or acute myocardial infarction and/or urgent coronary revascularization) at univariate and multivariate logistic regression analysis

Variables	Univariate analysis			Multivariate analysis		
	OR	95% CI	P	OR	95% CI	P
Chest pain score >6	11.21	6.33-19.84	<.001	7.03	3.80-12.99	<.001
Metabolic syndrome	6.23	3.08-12.64	<.001	3.03	1.36-6.79	.007
Age >50 y	5.11	2.55-10.25	<.001	2.87	1.38-6.07	.005
Diabetes mellitus	3.41	1.53-7.60	.003	2.56	1.07-6.16	.035
Gender (male)	1.78	0.97-3.27	.062	2.31	1.20-4.45	.012
Familiarity for CAD	2.03	0.70-5.91	.192	—	—	—
Smoke	1.26	0.55-2.86	.579	—	—	—

OR indicates odds ratio.





Conclusion

- Factor of 3 for CP score higher than 6
- A factor of 1 for each of male sex, age older than 50 years, MS, and DM
- Group A (0-1), B (2-4), C (5-6)

- The End