

Appropriateness of antiplatelet pretreatment in non-ST-segment elevation acute coronary syndrome: differences between unstable angina and acute myocardial infarction



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Objectives

To evaluate the appropriateness of antiplatelet pretreatment in patients with non-ST-segment elevation acute coronary syndrome (NSTEMI-ACS).

To determine whether the appropriateness differs between patients with unstable angina and those with acute myocardial infarction.

Materials and Methods

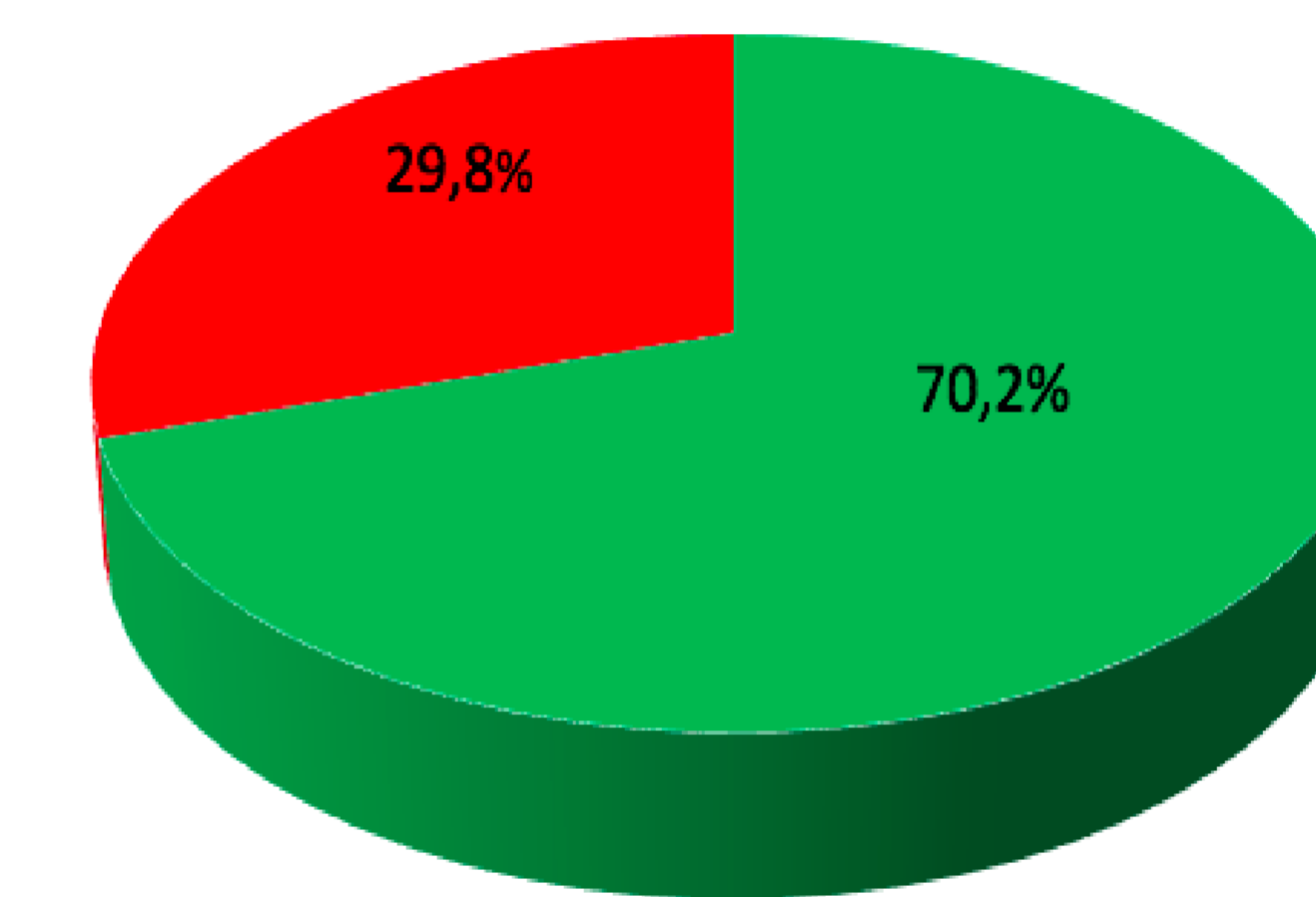
This prospective observational single-center study (June 2021-February 2022) included 172 consecutive patients with NSTEMI-ACS scheduled to undergo coronary angiography. This research has been approved by an ethical committee.

We designed an algorithm to classify pretreatment as appropriate or inappropriate according to the angiographic findings of coronary arteries. We used multivariate analyses to identify variables associated with appropriate pretreatment.

Results

Age	68,7
Gender (female)	24,4%
Active smoking	21,5%
Hypertension	72,7%
Diabetes Mellitus	39,5%
Dyslipidemia	69,8%
CKD	23,8%
Atrial Fibrillation/flutter	16,3%
CAD	37,2%
Chronic antithrombotic therapy	
- None	41,9%
- SAPT	30,8%
- DAPT	16,3%
- OAC	8,1%
- OAC+SAPT	2,9%
Crussade score	31,9
Grace score	111,9
Coronary angiography indication	
- Unstable angina	29,7%
- NSTEMI	65,1%
- Others (Tako-Tsubo syndrome, myocarditis...)	5,3%
Time from P2Y ₁₂ inhibitor loading dose to coronary angiography	
- <24h	49,1%
- >24h	50,9%
Antiplatelet pretreatment	76,6%

Appropriateness of antiplatelet pretreatment



n=172

Figure 1

Appropriateness pretreatment differences between UA and NSTEMI

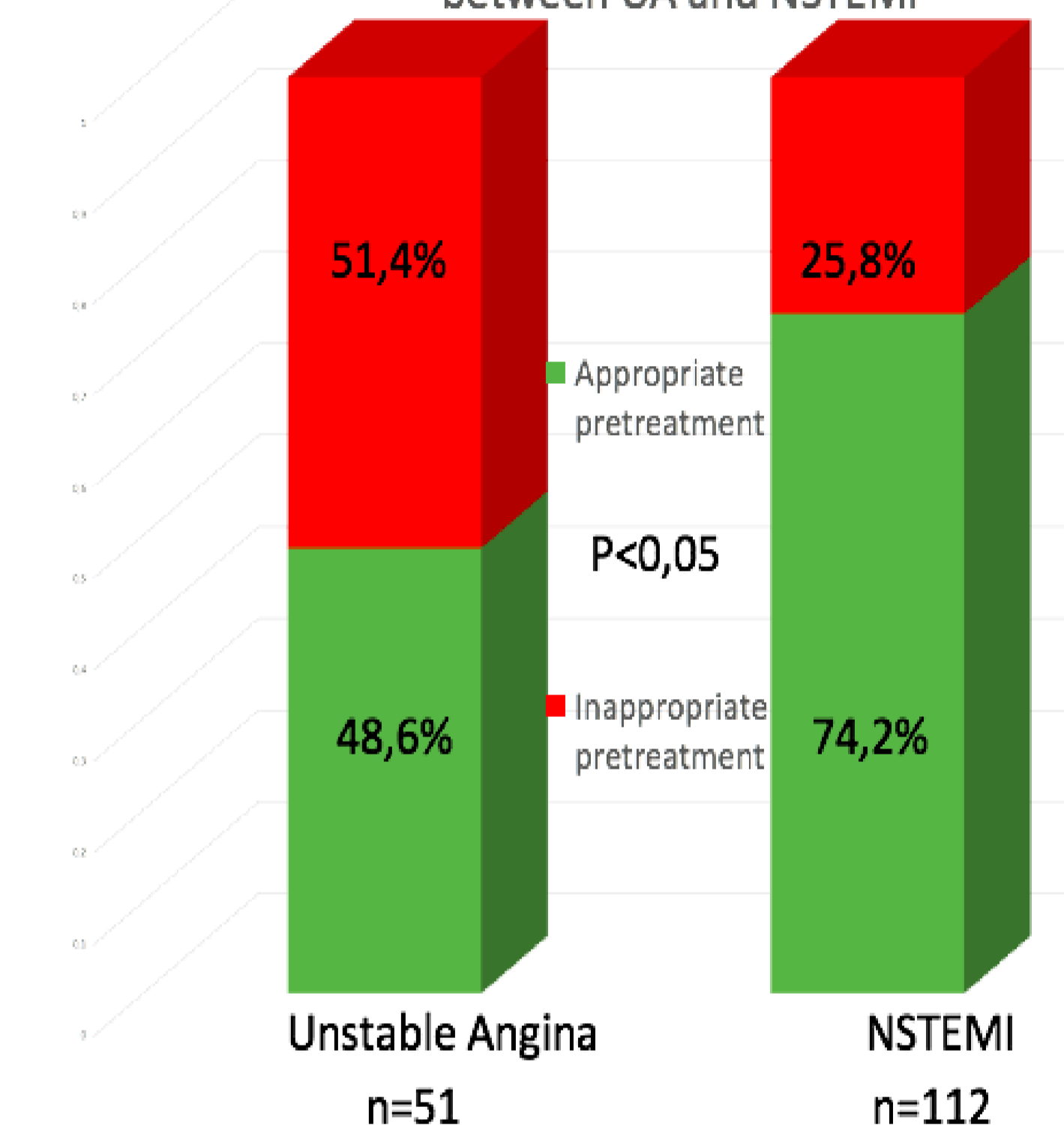


Figure 2

Conclusions

Antiplatelet pretreatment was appropriate in most patients with NSTEMI, but in less than half of those with unstable angina, suggesting a high rate of diagnostic error in unstable angina. Selecting appropriately the patients who really need pretreatment might avoid unnecessary drug side effects, invasive angiography as well as reduce hospital admissions and costs.

