



Available online at

ScienceDirect
www.sciencedirect.com

Elsevier Masson France

EM|consulte
www.em-consulte.com/en



CLINICAL RESEARCH

Prognostic impact of prepercutaneous coronary intervention TIMI flow in patients with ST-segment and non-ST-segment elevation myocardial infarction: Results from the FAST-MI 2010 registry

Impact pronostique du flux TIMI avant l'angioplastie coronaire chez les patients avec un infarctus du myocarde sur la mortalité à 3 ans : résultats du registre FAST-MI 2010

Clotilde Bailleul^a, Nadia Aissaoui^b, Guillaume Cayla^c,
Jean-Guillaume Dillinger^d, Bernard Jouve^e,
François Schiele^f, Jean Ferrières^g,
Tabassome Simon^h, Nicolas Danchin^a,
Etienne Puymirat^{a,*}, for the FAST-MI investigators

^a Department of cardiology, université Paris-Descartes, hôpital européen Georges-Pompidou, AP–HP, 75015 Paris, France

^b Intensive Care Unit, hôpital européen Georges-Pompidou, AP–HP, 75015 Paris, France

^c University of Nimes, university hospital of Nimes, 30900 Nimes, France

^d Department of cardiology, hôpital Lariboisière, AP–HP, 75010 Paris, France

^e Department of cardiology, hospital of Aix-en-Provence, 13100 Aix-en-Provence, France

^f Department of cardiology, university hospital Jean-Minjoz, 25000 Besançon, France

^g Department of cardiology, Rangueil hospital, 31059 Toulouse, France

^h Department of clinical pharmacology and unité de recherche clinique (URCEST), université Pierre-et-Marie-Curie (UPMC-Paris 06), hôpital Saint-Antoine, AP–HP, 75012 Paris, France

Received 27 February 2017; received in revised form 13 April 2017; accepted 19 April 2017

Abbreviations: AMI, acute myocardial infarction; CI, confidence interval; FAST-MI, French registry of acute ST-segment elevation or non-ST-segment elevation myocardial infarction; GRACE, Global Registry of Acute Coronary Events; HR, hazard ratio; NSTEMI, non-ST-segment elevation myocardial infarction; PCI, percutaneous coronary intervention; STEMI, ST-segment elevation myocardial infarction; TIMI, thrombolysis in myocardial infarction.

* Auteur correspondant. Department of cardiology, hôpital européen Georges-Pompidou, 20, rue Leblanc, 75015 Paris, France.
E-mail address: etienne.puymirat@egp.aphp.fr (E. Puymirat).

<http://dx.doi.org/10.1016/j.acvd.2017.04.004>

1875-2136/© 2017 Elsevier Masson SAS. All rights reserved.

Please cite this article in press as: Bailleul C, et al. Prognostic impact of prepercutaneous coronary intervention TIMI flow in patients with ST-segment and non-ST-segment elevation myocardial infarction: Results from the FAST-MI 2010 registry. Arch Cardiovasc Dis (2017), <http://dx.doi.org/10.1016/j.acvd.2017.04.004>

KEYWORDS

Acute myocardial infarction;
Percutaneous coronary intervention;
Thrombolysis in myocardial infarction

Summary

Background. — Thrombolysis in myocardial infarction (TIMI) flow grade 2 or 3 before percutaneous coronary intervention (PCI) in acute myocardial infarction (AMI) is associated with improved outcomes. However, no recent data are available on its impact beyond 1 year and/or by type of AMI.

Aims. — To assess the prognostic impact of prePCI TIMI flow at 30 days and 3 years in patients with ST-segment elevation (STEMI) or non-ST-segment elevation (NSTEMI) AMI.

Methods. — We compared long-term outcomes associated with TIMI flow grade 2/3 versus 0/1 in patients referred for PCI in the nationwide French registry of acute ST-segment elevation or non-ST-segment elevation myocardial infarction (FAST-MI) 2010.

Results. — TIMI flow grade 2/3 was found in 41% of patients with STEMI and 69% of patients with NSTEMI; it was associated with a lower risk of 30-day death in patients with STEMI (odds ratio 0.30, 95% confidence interval [CI] 0.12–0.77; $P=0.01$), but not in patients with NSTEMI (odds ratio 0.57, 95% CI 0.22–1.42; $P=0.23$). TIMI grade flow 2/3 was also associated with a lower risk of 3-year death in patients with STEMI (hazard ratio 0.69, 95% CI 0.49–0.98; $P=0.04$), but not in patients with NSTEMI (hazard ratio 0.79, 95% CI 0.56–1.11; $P=0.17$).

Conclusion. — TIMI flow grade 2/3 is observed more often in patients with NSTEMI; it is an independent predictor of early and late survival in patients with STEMI, but is not significantly related to early or long-term survival in patients with NSTEMI.

© 2017 Elsevier Masson SAS. All rights reserved.

MOTS CLÉS

Infarctus du myocarde ;
Angioplastie coronaire percutanée ;
Flux coronaire

Résumé

Contexte. — Le flux intrac coronaire (TIMI) 2 ou 3 avant une angioplastie chez les patients pris en charge pour un infarctus du myocarde (IDM) est associé à un meilleur pronostic. Cependant, il n'existe pas de donnée récente après un an de suivi et selon le type d'IDM.

Objectifs. — Évaluer l'impact pronostic du flux TIMI avant angioplastie à 30 jours et à 3 ans chez les patients présentant un IDM avec ou sans sus-décalage ST.

Méthodes. — Comparaison du devenir clinique à long terme selon le flux TIMI avant angioplastie (2/3 versus 0/1) chez les patients hospitalisés pour un IDM en utilisant les données du registre FAST-MI 2010.

Résultats. — Le flux TIMI 2/3 est observé chez 41 % des IDM avec sus-décalage et 63 % des IDM sans sus-décalage. Il est associé à une mortalité plus faible à 30 jours dans la population des IDM avec sus-décalage (OR 0,30, IC 95 % 0,12–0,77 ; $p=0,01$) mais pas dans la population des IDM sans sus-décalage (OR 0,57, IC 95 % 0,22–1,42 ; $p=0,23$). Le flux TIMI 2/3 est également associé à une mortalité plus faible à 3 ans dans la population des IDM avec sus-décalage (HR 0,69, IC 95 % 0,49–0,98 ; $p=0,04$) mais pas dans la population des IDM sans sus-décalage (HR 0,79, IC 95 % 0,56–1,11 ; $p=0,17$).

Conclusion. — Le flux TIMI 2/3 est plus fréquemment observé chez les patients avec un IDM sans sus-décalage. Il représente un facteur prédictif indépendant de survie précoce et à long terme chez les patients avec un IDM avec sus-décalage mais pas de manière significative dans la population des IDM sans sus-décalage.

© 2017 Elsevier Masson SAS. Tous droits réservés.

Background

Myocardial perfusion grade predicts final infarct size and left ventricular function in patients with acute myocardial infarction (AMI) [1–5]. Thrombolysis in myocardial infarction (TIMI) flow grade 2/3 before percutaneous coronary intervention (PCI) is associated with better clinical outcomes at 6 months and 1 year in patients with ST-segment elevation myocardial infarction (STEMI) [6–8]. Recent data

in patients with STEMI are, however, limited, especially with new antiplatelet agents; and, to our knowledge, no data are available beyond 1 year of clinical follow-up. Furthermore, the prognostic impact of TIMI flow in patients with non-ST-segment elevation myocardial infarction (NSTEMI) has not been studied. Therefore, the aim of the present study was to assess whether the prognostic impact at 3 years of prePCI TIMI flow differs in patients with STEMI or NSTEMI, using data from the French registry of acute ST-segment

Download English Version:

<https://daneshyari.com/en/article/8653684>

Download Persian Version:

<https://daneshyari.com/article/8653684>

[Daneshyari.com](https://daneshyari.com)