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CLINICAL RESEARCH

Persistence of combination of evidence-based medical therapy in patients with acute coronary syndromes

Persistance de l'association de traitements fondés sur les preuves chez les patients ayant un syndrome coronaire aigu

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Secondary prevention;
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Summary
Objective. — To analyse long-term adherence persistence of evidence-based medical therapy in 'real-world' patients with coronary disease.
Methods. — Cardiologists recruited the first three consecutive patients seen in either hospital clinics or private practice in 2006 who had been hospitalized for an acute coronary syndrome (ACS) in 2005 in France. Demographic characteristics, medical history, current treatments and medications at hospital discharge were recorded. The primary outcome was the persistence of the combination therapy comprising a beta-blocker, an antiplatelet, a statin and an angiotensin-converting enzyme (ACE) inhibitor (BASI).
Results. — A total of 1700 patients were included in this French observational study. The mean time from hospital discharge to consultation was 14 ± 4 months. At hospital discharge, BASI had been prescribed in 46.2% of patients, 80.2% of whom were still taking the combination at the consultation. Non-persistence was associated with severe noncardiovascular disease, atrial fibrillation and lack of significant coronary artery stenosis. When analysed separately, beta-blockers, antiplatelets, statins and ACE inhibitors had been prescribed at hospital discharge in

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82.4, 98.9, 89.2 and 58%, respectively. Persistence over the 14-months period was greater than 86% for each of the drug classes. After hospital discharge, BASI was initiated in 8.5% of patients. Fourteen months after hospitalization for an ACS, 45.6% of patients were taking BASI.
Conclusions. — Long-term persistence of BASI remained high after hospital discharge for an ACS, whereas the combination was started in a minority of those not discharged on this treatment. Fourteen months after an ACS, only half of the patients were receiving BASI, mainly due to failure to prescribe an ACE inhibitor at discharge. Our results highlight the importance of hospital prescription of BASI to obtain long-term persistence in ACS.

MOTS CLÉS
Prévention secondaire ;
Médecine basée sur l'évidence ;
Syndrome coronaire aigu ;
Persistance

Résumé
But de l'étude. — Analyser la persistance sur le long terme des traitements fondés sur les preuves chez les patients ayant présenté un syndrome coronaire aigu.
Méthodes. — Il s'agit d'une étude observationnelle conduite en France en 2006 par des cardiologues exerçant en secteur libéral ou hospitalier. Chaque investigateur devait inclure les trois premiers patients reçus en consultation et ayant été hospitalisés en 2005 pour un syndrome coronaire aigu. Les caractéristiques cliniques, les traitements à la sortie de l'hôpital et en cours le jour de la consultation d'inclusion étaient colligés. Le critère principal d'évaluation était la persistance de la combinaison thérapeutique : bêtabloquant, antiagrégant plaquettaire, statine, inhibiteur de l'enzyme de conversion (BASI).
Résultats. — 1700 patients ont été inclus. La durée moyenne entre la sortie de l'hôpital et l'inclusion était de 14 ± 4 mois. À la sortie de l'hôpital, le traitement BASI était prescrit chez 46,2 % des patients et 80,2 % d'entre eux recevaient encore le traitement BASI lors de l'inclusion. La non persistance du traitement BASI était corrélée avec la présence d'une pathologie sévère non cardiovasculaire, d'une fibrillation auriculaire et l'absence de sténose significative des artères coronaires. Analysés séparément, les bêtabloquants, les antiagrégants plaquettaires, les statines et les inhibiteurs de l'enzyme de conversion étaient respectivement prescrits à la sortie de l'hôpital chez 82,4, 98,9, 89,2 et 58 % des patients. Après la sortie de l'hôpital, le traitement BASI était initié chez 8,5 % des patients.
Conclusion. — La persistance du traitement BASI est importante lorsqu'il est prescrit à la sortie de l'hôpital, alors qu'il n'est initié que chez une minorité de patients qui ne le reçoit pas à leur sortie d'hôpital. Quatorze mois après une hospitalisation pour un syndrome coronaire aigu, seulement la moitié des patients reçoit un traitement par BASI, principalement en raison d'un défaut de prescription d'un inhibiteur de l'enzyme de conversion à leur sortie de l'hôpital.

Background

A large volume of evidence demonstrates that beta-blockers (B), antiplatelets agent (A), statins (S), and angiotensin-converting enzyme (ACE) inhibitors (I) have a beneficial impact on cardiovascular outcome in patients with a history of coronary disease [1—4]. In secondary prevention, the lower the concentration of low-density lipoprotein (LDL) cholesterol, the better is the outcome [5]. A similar relationship has been suggested between blood pressure and cardiovascular prognosis in patients with diabetes, and to a lesser extent in those with coronary disease [6—10]. Thus, risk factor control (C) is a cornerstone of the management of patients at high cardiovascular risk. In light of these data, European recommendations raised the concept of BASIC for patients with coronary disease [10]. This concept is intended to promote widespread use of combination treatment comprising a beta-blocker, an antiplatelet, a statin and an ACE inhibitor (BASI) in this population and to enhance risk factor control. In the ''real world'', however, many obstacles can jeopardize the implementation of evidence-based recommendations. Patients seen in everyday clinical practice are more likely to have comorbidities or to experience treatment side effects than those enrolled in randomized trials. Subjects in clinical trials often have better adherence to medications than do patients seen in everyday practice. Finally, in contrast to what happens in the ''real world'', the close follow-up of patients in randomized trials enhances the safety, and thus, the benefit of pharmacological treatments, as shown with spironolactone in the treatment of congestive heart failure [11,12]. Practitioners faced with these problems may be reluctant to continue with evidence-based treatments initiated during hospitalization. Thus, it is of paramount importance to analyse, using ''real-world'' data, persistence of combination of evidence-based medical therapy in patients with coronary disease.

Methods

The nationwide cross-sectional PREVENIR-4 study was conducted in a representative group of cardiologists in France. Clinicians based in public and private hospital departments were randomly selected from a comprehensive national database comprising all French cardiologists. The sample was regionally stratified to ensure the representativeness