DUAL ANTIPLATELET THERAPY AFTER MYOCARDIAL INFARCTION AND PERCUTANEOUS CORONARY INTERVENTION: ANALYSIS OF PATIENT ADHERENCE USING HEALTH REIMBURSEMENT DATABASE

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Background: Current guidelines, recommend the use of dual antiplatelet therapy (aspirin+clopidogrel, DAT) for patients after acute myocardial infarction (MI). However, there have been few reports on the adherence of patients to recommended anti-platelet regimens. Aim: We sought to examine the rates of initiation and adherence to this recommended treatment regimen in a population of patients admitted with MI and subsequent percutaneous coronary intervention (PCI).

Methods: A cohort study was conducted using data from the main French health insurance reimbursement database of the Aquitaine region (southwest France). Patients hospitalized for MI+PCI in 2008 in public hospital were initially identified, and then their reimbursement form of DAT for the subsequent 12 months was reviewed. Adherence was assessed by using two parameters: proportion of days covered by the treatment (i.e., medication availability) and persistence. Discontinuation was defined as a minimum gap of 30 days. Persistence was measured as the duration of uninterrupted therapy on the patient's index product using Kaplan Meier survival curve analysis regardless of whether the treatment is then taken.

Results: The study included 634 patients with MI and PCI in 2008, that had no reimbursement of DAT in the previous 2 months. Among them, 34 patients (5.4%) had reimbursement for a single antiplatelet therapy immediately after discharge and 6 additional patients died during the first month (0.9%). The sex ratio was 2.6 and the mean age was 65.5 CI95%[64.5;66.6].

The mean age of the 34 patients was 69.5 CI95%[65.0;74.0] and three of them were treated with oral anticoagulants drugs. Therefore the final cohort for complete analysis consisted of 594 patients and then94.6% initiated treatment with DAT.

During the first three months, the probability of stopping DAT (meaning both aspirin and clopidogrel) for at least for one month was 18.6 % for the remaining 594 patients. Taking into account, the additional 34 patients who did not submit for any reimbursement, at three months after MI and stent placement, 22.9% of the total group of patients had either not received or discontinued their DAT for at least one month. For the 12 months period, 49.1% of patients had a gap of at least 30 days in their DAT, although the medication availability was 90%.

Conclusion: These results suggest that while the patients have good medication availability, there are gaps in treatment. At three months after MI + PCI, the probability of having a gap both of the dual antiplatelet therapy (DAT), for at least one month, was almost 20%. The results presented are likely to be an underestimation of adherence since some patients who buy their treatment, may not take it. This could explain what has been termed ‘resistance’ of some patients, to antiplatelet therapy.

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