High adherence to therapy and low cardiac mortality and morbidity in patients after acute coronary syndrome systematically managed by office-based cardiologists in Germany: 1-year outcomes of the ProAcor Study

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Key points and discussion

- Due to the immense high mortality it is crucial for patients after an ACS to follow a stringent risk management protocol for prevention of secondary coronary events.
- Adherence to treatment often is low, in particular if longer-term therapy is necessary.

Results

Patients’ baseline characteristics

- High adherence to therapy and low cardiac mortality and morbidity in patients after acute coronary syndrome systematically managed by office-based cardiologists in Germany: 1-year outcomes of the ProAcor Study.
- The study documents were approved by the Ethics Commission of the Bavarian Medical Chamber on 8 November 2011 (project number 11110); pertinent guidelines for data protection were respected.
- Eligibility criteria: patients were at least 18 years old, had been hospitalized due to a STEMI, NSTEMI or UA event, and had provided written informed consent for study participation within seven days after the ACS index event.

Background

- ProAcor assured patient acceptance and effectiveness of a structured management program in patients after acute coronary syndrome (ACS) in a special setting of office-based cardiologists.
- 1033 patients with ACS (STEMI 44.3%, NSTEMI 39.5%, unstable angina pectoris [UA] 15.2%, unspecified 1% ) were treated for 1 year after hospital discharge.
- During follow-up treatment rates with cardiac medication remained high in all groups, with dual antiplatelet therapy in 91.0% at 3 months, 90.6% at 6 months, and 82.1% at 12 months, respectively.
- 12 months after the inclusion, a total of 798 patients (76.7%) still participated in the program.

Methods

- ProAcor is an open, randomised, observational prospective study which was set up to investigate patients with ACS treated under real-life conditions (outside clinical studies). Study identifier in Clinical.gov is NCT01490465.
- A total of 36 clinics and/or hospitals and office-based cardiologists from all German federal states participated.

Results

- Concomitant diseases were prevalent in all groups. Patients in the NSTEMI group tended to have a higher prevalence of concomitant diseases and cardiovascular risk factors compared to patients in the STEMI and UA groups.
- A prior cardiac event was noted in 15.3% overall, with higher frequency in the NSTEMI and UA groups compared to the STEMI group.
- Treatment rates with antiplatelet drugs remained high during the study follow-up. For all time points, rates of antiplatelet drug usage (aspirin or DAPT) were higher in the STEMI group compared to the NSTEMI and UA groups.

Adherence to therapy

- According to physician assessment, 868 patients (88.0%) were always adherent (i.e., seven days a week), 90 patients (11.3%) mostly compliant (4 to 6 days a week), and 4 patients (0.5%) rarely (<3 days a week), and one patient never (0.1%).
- There were no relevant differences in adherence among patients from the STEMI, NSTEMI or UA groups, respectively.

Quality of life

- Patients with STEMI tended to report less problems compared to those with NSTEMI or UA. On the VAS (0 worst, 100 best state of health) at 3 months as well as at 12 months the median value was 80 points (interquartile range 70-90 for both time points), with little differences between subgroups.
- The EQ-5D index score was 0.91 ± 0.18 points at inclusion (STEMI 0.92, NSTEMI 0.90, UA 0.89) and was unchanged at 12 months.

Mortality and cardiac events during follow-up

- After the index ACS event new cardiac events occurred in 128 patients (14.4%). Figure 4 during the full observation period, 78 patients (9.0%) had the new event within the first 3 months, 30 patients (3.6%) between 3 and 6 months, and 35 patients (4.4%) between 6 and 12 months. The rate of new cardiac events was higher in the STEMI group (62 patients, 15.2%) than in the NSTEMI group (51 patients, 14.7%) and the UA group (75 patients, 11.3%), respectively.

Fig 4: Death, stroke and cardiac events

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