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EDITORIAL

Quality of Life Assessment in Patients With ST-Elevation Myocardial Infarction (STEMI): An Opportunity to Improve the Quality of Care That Should Not Be Missed

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Editorial referring to the article: Quality of Life in Patients After Acute ST-Segment Elevation Myocardial Infarction

In chronic diseases, the Quality of Life (QoL) is one of the most important patient-reported outcomes. Cardiovascular diseases are the main cause of death worldwide and ischemic heart disease represents an important health burden.[1] In a large population-based cohort, individuals with self-reported previous myocardial infarction (MI) presented worse self-perceived health statuses in all domains, particularly in mobility and anxiety / depression.[2] However, QoL was not independently associated with MI but instead was associated with age, sex and number of comorbidities, which were significantly higher in patients with prior MI. In this study, long-term QoL was more impaired in men, as compared to women.[2] Nevertheless, in population-based cohorts, we have many possible pitfalls, considering that a diagnosis of MI and other chronic diseases is self-reported; therefore, it is impossible to confirm this diagnosis. It is also impossible to differentiate between ST-elevation MI (STEMI) and non-STEMI, and it is rarely possible to assess the QoL at the same point in time after MI. In fact, we can expect QoL to be much different in the first few months after MI when compared with the QoL several years later.

A more structured study was performed in Australia, in which the QoL was assessed at earlier time points (4 weeks and 6 months).[3] The study sample consisted primarily of males (representing more than 75%), but with a mean age similar to previous studies in MI populations. Health-related QoL improved at 6 months following primary percutaneous coronary intervention for physical and mental health.[3] All aspects of cardiac-specific health status had improved (physical limitation, anginal frequency, treatment satisfaction, and QoL), except for angina stability.[3] Patients aged ≥ 70 years had poorer physical QoL and physical limitations, but better mental QoL at both time points.[3] However, patients were from a specific remote geographic region and were included in 2010 and 2011. Therefore, this did not represent a contemporary sample of patients, and it does not reflect current treatment standards. All in all, those results are not comparable with current populations of STEMI patients from different regions around the world.

In this issue of the journal, Santos et al. assessed QoL in patients after STEMI.[4] This observational study included 174 STEMI patients included in the PERSISST study, conducted in Brazil. QoL was assessed at 30 days and 180 days after STEMI, using the 12-item short form health (SF-12) survey, focusing on sex differences and repercussions on physical and mental dimensions. The sample included more men (56%) than women, with a mean age of 57 to 60 years. QoL perception was impaired at both time points. Regarding sex differences, this study showed that women had a poorer perception of QoL, in both dimensions (physical and mental health), with the physical component being the most impaired. When compared to previous studies, the present work included patients with a confirmed STEMI diagnosis, in a contemporaneous cohort, and the QoL was evaluated in the early months after STEMI (one and six months after the event).

This study has some limitations, as mentioned by the authors. Firstly, some patients did not participate in both time points, and their QoL could not be compared over

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Quality of life; Myocardial Infarction; STEMI; ST Elevation Myocardial Infarction.

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time to check for any possible change. Secondly, this led to an important bias, since each group has different baseline characteristics. For instance, at day 30, although the proportion of females is similar to day 180, they are significantly younger in the early group, and the impact in daily life activities and mental health might be more significant because younger women are more active. Thirdly, at each time point, the number of patients is small, as roughly only 50% of the total sample of 174 individuals participated in each time point assessment.

Another important point is the fact that the present study did not collect information on the clinical course of the patients, such as treatment (invasive and pharmacological), left ventricular function, and comorbidities, which would have been quite important in reaching a comprehensive understanding of the impact of those variables in QoL over time. Nevertheless, this study's results are highly relevant and serve to open the door to further study on this topic. Such reporting is important in order to aid in the local and regional decision-making performed by health policy-makers and the medical community. Moreover, patients can be directly involved in assessing the impact of MI on QoL, and this type of analysis is highly recommended in international guidelines on acute MI in the evaluation of QoL.[5]

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