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EDITORIAL COMMENT

Stress and anxiety: Why should I care?

Stress e ansiedade: porque devo preocupar-me?

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Stress and psychological issues are not the primary focus of attention for most physicians, nor a common field of study for cardiologists. Still, it is estimated that 41.5% of the adult population in the US are affected by occasional symptoms of anxiety and/or depression,[1] and at least one in five adults suffers from significant mental illness. Psychiatric disease, despite its prevalence, is often seen as unpleasant, or merely as a differential diagnosis – anxiety works as an alternative explanation for cardiac symptoms, especially when the cause of these symptoms is unclear.

When a patient is admitted with an acute coronary syndrome (ACS), acute management does not look deep into individual risk factors for the event. Standardizing care is the focus of the European guidelines[2] and psychosocial factors are not mentioned in that document.

In the current issue of the *Journal*, Santos et al.[3] looked for an association between emotional stress and the occurrence of an ACS. In a single-center prospective observational study, a group of 171 patients with ACS were surveyed using the 10-item Perceived Stress Scale (PSS-10). Their mean age was 64.5 years, 36.5% had ST-elevation myocardial infarction and 38% were female – a contemporary ACS population. They were compared with a control group from a previous validation of this tool in a Portuguese population.[4] Their main findings were that patients with ACS had a higher perceived level of stress compared to the control group (a mean score of 19.5 vs. 15.3), and that the study population had a high prevalence (70/171 patients) of pathological stress (defined as >20 points in males and >22 in females).

Several limitations should be considered. The sample size is relatively small for a prevalent disease. A direct comparison between the study population and the control group is biased as the control group had a different mean age and different comorbidities. In the control group,[4] smoking was associated with higher stress values. As smoking is a prevalent risk factor for ACS, smoking could partially explain the higher stress values found in the ACS population. However, in this study population, smokers and non-smokers had similar (high) scores. The authors also state that pathological stress had no prognostic impact. However, as the number of adverse events was low and the follow-up was short, this is difficult to ascertain. Finally, as the questionnaire was applied only during the index hospitalization, we cannot know if those patients had a higher level of stress compared to the general population before the event, or whether their increased stress levels were just a consequence of the ACS.

A merit of Santos et al.'s work is that it reminds us of a potential failure to refer patients with coronary artery disease and concurrent untreated mental illness to a psychiatric clinic. There is evidence that mental illness has an impact on adherence to treatment and cardiovascular risk factor control.[5] Moreover, a systematic review showed that psychological interventions lead to a reduction in cardiovascular mortality (relative risk 0.79), as well as improved anxiety and stress scores,[6] although it did not demonstrate a reduction in overall mortality or myocardial infarction. There is wider evidence as well, as cardiac rehabilitation programs worldwide have shown that exercise-based

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rehabilitation leads to an average 26% risk reduction in cardiovascular mortality,[7] consistent across intervention types. One could say it is not just about physical exercise; caring for patients' mental health will reduce the risk of another event.

Conflicts of interest

The author has no conflicts of interest to declare.

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