

## Preoperative anxiety: what are we really doing?

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To the Editor,

We read with great interest the article by Miraglia Raineri et al about the use of Amsterdam Preoperative Anxiety and Information Scale (APAIS) to detect anxious women undergoing breast biopsy (1). Perioperative anxiety is experienced by 25%-80% of patients admitted to hospital and it should be considered one of the most prevalent “symptoms” of inpatients (2). It has been defined by Ramsay as “an unpleasant state of uneasiness or tension that is secondary to a patient being concerned about a disease, hospitalization, anaesthesia and surgery, or the unknown” (3). Preoperative anxiety is able activate stress response by neuroendocrine system which can result in homeostasis alteration, thus leading to exacerbation of cardiovascular disease; this can affect not only preoperative period but also intraoperative physiological parameters and postoperative recovery (4).

Despite the great influence that it can have not only on psychological but even on physical status, preoperative anxiety is still underestimated and poorly investigated during anaesthetic visit and it is supposed to be managed only by a “friendly” approach of staff in the operating room .

Many questionnaire has been so far proposed to recognise anxious patients: STAI (stait-trait anxiety inventory) is one of the most complete questionnaire but it is time expensive and not specifically created to detect surgery- or anaesthesia-related anxiety. APAIS (Amsterdam preoperative anxiety and information scale) tried to overcome these limits: its results correlate well with STAI and the ease of use determined its international diffusion through translations in many languages (5-6).

On the other hand, once detected, preoperative anxiety is difficult to manage because so many factors contribute to determining it such as personal life ex-

perience, sex, age, ethnicity, previous surgery, type of surgery, medication, comorbidity (in particular psychiatric disorders) (7). Moreover, it is difficult to identify the different components of perioperative anxiety: there are, in fact, so many aspects of surgery, anaesthesia and postoperative period which patient can be afraid of (e.g. pain, awareness during the intervention, needles, invalidity, recovery) and each one should be handled differently.

The complexity of preoperative anxiety management does not correspond to a systematic effort in order to find effective strategies. Psychological intervention needs too much time to bring good results especially because surgery is often scheduled on short notice. Other interventions include hypnosis, information, cognitive behavioural therapy targeting anxiety and depression, music therapy, and acupuncture (2). None of them demonstrated a definitive improvement of patient outcomes and this is probably due to the need to distinguish anxiety causes for every person which should be approached in different ways.

The lack of knowledge in the field of preoperative anxiety and the lack of randomised controlled studies reflect the mechanistic view of surgery and of the patient that still predominates. We hope that in the near future the process of humanization of medicine will give the proper attention to psychological aspects such as preoperative anxiety, not only to improve clinical outcomes but also to ameliorate patients perception of one of the most unpleasant experience of their life.

**Conflicts of interest:** Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

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