Feasibility and clinical benefit of the cognitive–behavioral intervention for preparing patients for transesophageal echocardiographic study

Acute procedure anxiety, which is defined as an excessive fear of medical procedures, may only cause an unpleasant feeling of acute discomfort and/or distress or may be severe enough to interfere with completion or appropriate conduction of the necessary procedures.

Transesophageal echocardiography (TEE) is a unique procedure in which patient anxiety may pose important implications. First, these patients are more vulnerable to the hemodynamic consequences of stress and anxiety due to the higher prevalence of co-morbid cardiovascular conditions, including arrhythmias such as atrial fibrillation. Second, the successful completion of TEE is highly dependent on the patients' cooperation. In a multicenter survey conducted in 15 European centers, lack of patient cooperation was one of the major causes of unsuccessful TEE attempts (1).

During the past decade, there has been a great deal of interest in research and clinical application of non-pharmacologic and/or psychologic interventions to overcome procedure-related fear and anxiety. However, searching the literature for data on patient anxiety prior to TEE provides very little evidence on this particular topic.

We read with great interest the article in this issue of Anatol J Cardiol entitled "Feasibility and clinical benefit of cognitive–behavioral intervention for preparing patients for transesophageal echocardiography" by Wejner-Mik et al.(2), where they reported their experience on impact of cognitive behavior intervention (CBI) on the severity of anxiety, patient and physician comfort, and administered dose of sedatives in a group of patients undergoing TEE. Though subject to several limitations, their experience is certainly a turning point in preparing patients for elective TEE. They demonstrated how a simple and low-cost cognitive–behavioral intervention (CBI) can significantly decrease patient's anxiety and discomfort and increase physician's comfort. As mentioned by the authors, the present investigation was planned as a pilot study to gather preliminary data for a randomized blinded study in a larger scale. Therefore, to benefit the authors in their future investigation, we mention a few important issues to be considered in the next study.

To incorporate CBI into clinical practice, the assessment of predictors of successful response to CBI, such as age, sex, level of education, and socio-economic status, is important. It is also worth noting that although the wide variety of indications for TEE makes it difficult to assess the correlation between CBI success rate and particular index indication, we suggest categorizing the study subjects in as many similar groups as possible with respect to their clinical presentation. Obviously, the nature and degree of anxiety in patients with acute, serious, or life-threatening conditions completely differ from those with chronic and less severe diseases, and these patients may also need different therapeutic approaches. Providing separate data for each category might help to provide more individualized interventions for each subgroup. In addition, qualitative parameters, such as anxiety, discomfort, and cooperation, are advised to be measured more precisely by qualified academic questionnaires. Moreover, what would be more valuable in routine clinical practice is the determination of whether a statistically significant decreased use of sedatives translates into clinical benefits—lower incidence of complications, such as respiratory depression and aspiration pneumonia; a higher patient cooperation in performing necessary maneuvers, such as Valsalva maneuver; and even decreased need for the medical staff to supervise patients with decreased consciousness after the procedure.

Mitra Chitsazan[1], Mandana Chitsazan[2]
[1]Rajaie Cardiovascular, Medical and Research Center, Iran University of Medical Sciences, Tehran-*Iran*
[2]Shahid Beheshti University of Medical Sciences, Tehran-*Iran*

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Address for correspondence: Mitra Chitsazan, MD, Department of Cardiology,
Rajaie Cardiovascular, Medical and Research Center, Iran University of Medical Sciences, Tehran-*Iran*
Phone: +98-9122210385 E-mail: mitra.chitsazan66@yahoo.com
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