Preoperative anxiety

Preoperative anxiety is frequent in neurosurgical patients and of high clinical relevance (e. g., associated with anestesiological requirements and surgery outcome). Little however is known about the quality of instruments for assessment of preoperative anxiety in this specific patient group and setting.

A paper of Goebel et al., from Kiel, Germany focused on the psychometric properties of widely used questionnaires. Aim of this study was thus to enable both the clinician and the researcher to select appropriate instruments for assessment of surgery-related anxiety.

The following instruments for assessment of preoperative anxiety were administered in a pseudo-randomized order one day prior to surgery in sample of 158 neurosurgical patients: The State Trait Operation Anxiety Inventory (STOA) - state scale, the Amsterdam Preoperative Anxiety and Information Scale (APAIS), and the one-item visual analogue scale (VAS). The questionnaires were psychometrically tested according to classical test theory (validity, reliability, diagnostic accuracy).

Construct validity was supported in all applied measures (convergent and divergent validity, known-group comparisons). For the STOA state, we found a one factor scale structure and thus no support for the proposed subscales covering cognitive and affective anxiety. The proposed scale structure of the APAIS, measuring anxiety and information requirement, was replicated. Internal consistency as indicator for reliability of the STOA and the APAIS was excellent (Cronbach's alpha = 0.937/0.868). All instruments showed adequate diagnostic accuracy with the most favourable results of the STOA.

All instruments included in this study can be recommended for assessment of surgery-related anxiety in neurosurgical patients with regard to their psychometric properties. Each instrument offers distinct advantages. Thus, clinicians and researchers can base their individual choice on specific aims and available resources [1)].

Patients often present to the neurosurgeon frustrated and desperate after a long preoperative course. It is important to acknowledge the uncertainty regarding diagnosis and response to shunting when counseling patients. Comorbid conditions interfere with the ability to assess progression of iNPH and the effectiveness of the shunt. Patient caregivers play a large role in decision-making and clinical course, and should be included when counseling patients [2)].

Hypnosis session prior to surgery was an effective complementary method in decreasing presurgical anxiety, and it resulted in better pain control as well as reduced ventilator assistance following coronary artery bypass grafting (CABG) surgery [3)].

Results indicate that screening for presurgical distress is likely to identify those patients at risk for poor outcome. Studies to evaluate whether presurgical psychological treatment improves outcome are warranted [4)].

1)

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