(835) Utilization of and beliefs about presurgical psychological screening: A national survey of anesthesiologists

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Presurgical psychological screening (PPS) evaluations identify and quantify risk factors associated with surgical outcome in order to render a decision concerning surgical prognosis. PPS has been used for decades to evaluate surgical candidates for multiple types of pain related interventions. The purpose of this study is to survey anesthesiologist utilization of PPS in relation to spinal cord stimulator (SCS) and/or pump implantation. No known investigation of this issue has been published. All anesthesiologists members of the American Pain Society, American Board of Pain Medicine, and the North American Spine Society have been contacted via telephone and/or email. Preliminary data on 76 subjects indicate that nearly half of anesthesiologists (46%) implant SCSs and/or pumps. Of those who do implantations, 100% report using PPS and refer patients to a psychologist or psychiatrist for a comprehensive evaluation. Further, 91% report that the PPS was done before a trial. This anesthesiologist sample implanted 3711 SCSs (X = 106; range = 5 - 850) and 2280 pumps (X = 65; range = 5 - 300). When asked to rate the value of the PPS on a 0 (least important) to 10 (most important) scale in rendering a final decision to perform surgery or not, anesthesiologists rated the PPS as a 6.87 on a 0 - 10 scale (range 2 - 10) and 91% reported being familiar with the qualifications and experience of the person conducting the evaluations. In less than 1%/ of the cases, anesthesiologists reported implanting an SCS or pump if the PPS was negative. Data collection is ongoing and additional findings will be reported, including anesthesiologist beliefs about what factors are the most powerful predictors of surgical success or failures, as well as what anesthesiologists feel are the most important components of the PPS.

(836) Development and testing of the Biopsychosocial Care Model in Fibromyalgia Syndrome

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The multidimensional nature of fibromyalgia syndrome (FMS) requires health care practitioners (HCP's) adopt a biopsychosocial approach to care in order to select individualized interventions for patients. Engel introduced a conceptual model of biopsychosocial care in 1977 to address the lack of scientific understanding of human behavior and the psychological and social aspects of illness to patient care. Because of the multidimensional nature of fibromyalgia, a biopsychosocial model should guide care for these patients. The extent to which this model is adopted in practice is not known. Additionally, the interaction of practitioner characteristics, specifically, philosophical perspectives and frustration levels towards patients, was not included in the original model. The historical development of the original biopsychosocial model was explored. A new expanded model is introduced to incorporate the underlying assumptions of characteristics of the practitioner-patient relationship and their influence on biopsychosocial care. This study utilized a descriptive correlational design to explore the influence of these factors on the adoption of the Biopsychosocial Care Model in patients with FMS and differences in these characteristics among practitioners. The Organicism-Mechanism Paradigm Inventory measured philosophical perspective and the Difficult Doctor Patient Relationship Scale measured frustration level in relation to attitudes and beliefs about psychosocial care measured by the Physician Belief Scale. Descriptive statistics, t-tests and regression analysis were conducted. Nurse practitioners and physicians differed significantly on philosophical perspective, frustration level, and attitudes and beliefs about psychosocial care. Philosophical perspective was a weak predictor or attitudes and beliefs towards psychosocial care for patients with FMS (r = .247, p = .004). Frustration level towards FMS was the stronger predictor of attitudes and beliefs towards psychosocial care (r = .48, p = .000). These findings have implications for improving care, providing a basis for education for HCP's, and impacting policy regarding access to care for patients with FMS.

(837) A literature review of psychological predictors of spinal cord stimulator outcomes

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It is well documented that while spinal cord stimulator (SCS) implantation benefits the majority of pain sufferers who obtain it, a substantial subset of patients do not benefit from this intervention. A systemic literature review was conducted to identify the psychological factors that predict the outcomes of SCSs in chronic pain sufferers, as well as the degree to which they accurately predict surgical outcome. Relevant articles were identified through a Medline search between the years of 1975-2004. Cross referencing was done with each article obtained to ensure that no relevant articles were missed in the Medline search. Fourteen articles were identified and reviewed. At least one physician was an author on all 14 studies and 12 of the 14 studies had physicians as first or sole authors. Twelve of the 14 studies found clear evidence of psychological factors being powerful prognostic factors in SCS outcomes. The most frequently studied assessments were the clinical interview and the Minnesota Multiphasic Personality Inventory (MMPI-1 or 2 depending on the time of publication). MMPI elevations on Scale 2, the “Depression” scale, was most frequently predictive of surgical failure, followed by scales 1 (Hysteria) and 3 (Hypochondriasis). Depending on the study, thorough psychological screening predicted surgical successes or failures for 80%, 85% or more of the patients. These findings are consistent with presurgical psychological screening evaluations predicting success. In less surgical interventions (e.g., fusions, laminectomies). A representative conclusion from the studies in this literature is that psychological evaluation is essential prior to surgery.

(838) Parental judgments of pain in infants 2, 4, 6 & 12-months exposed to routine immunization injections

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Parents of pre-verbal infants are often asked to assess the presence or absence and severity of pain their child may be experiencing. This can be a challenging task, as they must extract information specific to pain from generalized distress reactions, substantial variability in response, and similarities in response to noxious and non-noxious aversive events, among other influences on their judgments. Characteristics of parents such as cognitive biases, sensitivity, knowledge and emotional availability to the child would appear to influence judgments in a manner that is not presently well understood. Additionally, the manner in which parental assessment of pain changes as the infant develops has received little study. The current study examined differences in parental judgments of pain over the first year of life. Participants in this cross-sectional study were 148 infants (37 infants in each of 4 age groups: 2, 4, 6 and 12-months) receiving routine immunization injections and their parents. Following immunization procedures, parents provided judgments of the amount of pain their infants experienced on two measures of pain intensity (visual analogue and verbal descriptor scales) and one measure of pain affective discomfort (verbal descriptor scale). On the measure of pain affect, group differences approached, but did not reach significance. On both pain intensity measures, significant differences in parental assessments of pain were found, with parents attributing greater pain intensity to 2 and 4 month old infants, compared to the 6 and 12-month olds. These results are intriguing in that objective measures of pain (facial action and body movement) indicated no differences in global pain expression among the four groups. The results suggest that parents may not be using behavioral cues as their primary source of information when decoding the potential pain responses of their infants, but integrate this information with knowledge of the child and current circumstances.