Who and When Should We Screen? Assessing the Need for Psychological Support in Patients With Sports Injuries in the Setting of An Orthopedic Surgery Outpatient Clinic

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Summary:
A history of surgery for a sports injury as well as increased levels of pain were the two main factors associated with the presence of anxiety in patients in a Sports Medicine Outpatient Clinic.

Data:
Introduction: Recovery from a sports injury entails several factors that play an important role in a patient’s outcome. Significant association has been shown between psychological factors and recovery time, patient satisfaction, pain control and return to sport. However, the ideal target population for psychological services has not been defined. This study aims to describe patients and their characteristics who have psychological distress following a sports injury. Methods: The GAD-7 Anxiety Score Questionnaire, a validated questionnaire to detect psychological distress, was distributed among outpatients in a Sports Medicine Clinic. Patient demographics as well as information on the type of injury, level of sport, timeline in recovery, and history of surgery were obtained. All ages and genders were included. Using a GAD score of 10 as an indicator of psychological distress, descriptive statistics were used to present the characteristics of the population who met these criteria. Chi squared test was performed to compare the rates of psychological distress based on patient characteristics, and linear regression analyses were performed to identify the relationship between GAD-7 scores and injury characteristics. Results: 254 patients were included in this study, mean age of 40 (18) (88 males, 166 females). Mean GAD-7 scores were of 2.4 (3.9). 112 patients participated sports recreationally and 194 consulted for knee symptoms. 121 presented with an acute injury followed by those attending post-operative visits (83). 44% patients had surgery for their injuries while 55.9% had not. The average level of pain reported was of 4.1 on a 1-10 scale. Based on GAD-7 >10 points, 18 patients (7%) reported significant levels of anxiety (7 males, 11 females). This constituted 8% for the male patients and 7% of the female patients. Significant association was found between current pain score and GAD-7 score in patients with a history of surgery associated with their injury, while none was identified in the non-surgical group. No relationship was found between other factors associated to the injury such as sport, type of injury, injured body part, level of sport, perceived percentage of joint function, or age. Linear regression to show association between GAD-7 and postoperative time showed trends toward significance. Within the GAD-7 components, feelings of nervousness or anxiety were reported by 33% of patients and the inability to relax was present in 30% overall. Conclusions: Based on the results obtained, there is a significant increase in reports of anxiety among patients with higher levels of pain and a history of surgery associated to their injury. There was a trend towards significance for association between GAD-7 and postoperative time. A history of surgery for a sports injury as well as increased levels of pain were the two main factors associated with the presence of anxiety in patients in a Sports Medicine Outpatient Clinic. Establishing a screening process for patients with high levels of pain or in the setting of their postoperative visits in order to assess the need for psychological support might be beneficial to their wellbeing and recovery outcomes.

Category: Sports Medicine

The Influence of Industry Affiliation on PRP Randomized Controlled Trials

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Summary:
The results of this study suggest that qualitative conclusions and outcome scores were found to not be associated with industry affiliation in randomized controlled trials with PRP.

Data:
Purpose Industry funding and corporate sponsorship have played a significant role in the advancement of medical research and technology. However, this relationship raises concerns of how industry association may bias research findings and influence perception of results. As novel therapies continue to emerge, it is necessary to evaluate the literature for reliable and evidence-based clinical research before implementing these therapies into practice. The purpose of this study was to determine whether industry affiliation plays a role in the outcome of randomized controlled trial (RCT) studies investigating platelet-rich plasma (PRP) versus hyaluronic acid (HA), corticosteroids (CS), or placebo for knee osteoarthritis (OA). Methods A search of the PubMed, Cochrane, and MEDLINE databases for RCTs of Level 1 or 2 evidence published from 2011 to present comparing PRP versus HA, CS or placebo for the treatment of knee OA was performed by two independent reviewers. To determine industry affiliation, the conflicts of interest, funding and disclosure segments of publications were assessed and all authors were reviewed through the AAOS Disclosure and Open Payments databases. Industry affiliation by financial conflicts of interest were identified as license or royalty fees, paid consultant fees, advisory position or speaker, employee, stock options, or research funding companies that synthesize PRP or manufacture devices to administer PRP. Studies were classified as industry affiliated (IA) or non-industry affiliated (NIA). The outcomes of each study were rated as favorable, analogous, or unfavorable according to predefined criteria based on previously published protocols and also statistical significance by comparing patient reported outcome measures. Favorable studies showed superior results, analogous studies demonstrated no significant difference, and unfavorable studies had inferior outcomes when comparing PRP to HA, CS or placebo. Results A total of 37 (6 IA and 31 NIA) studies were available for analysis. All studies were of level 1 (67.6%) or level 2 (32.4%) evidence, with no statistically significant difference between IA and NIA studies (p = 0.4443). Nineteen (51.4%) studies reported PRP as favorable compared to other treatments, while 18 (48.6%) studies showed no significant differences between PRP and other treatments. No studies showed worse outcomes with PRP compared to HA, CS, or placebo. There was no significant difference in qualitative conclusions between the IA and NIA cohorts, with the IA cohort having 3 favorable studies and 3 analogous studies, while the NIA group included 16 favorable studies and 15 analogous studies (p = 0.8881). When comparing IA versus NIA studies, using 6 and 12-month WOMAC and IKDC scores, there were no significant differences in outcome measures. Conclusion The results of this study demonstrate largely favorable and analogous results with PRP compared to other intra-articular injection therapies for knee OA in randomized controlled trial studies. Qualitative conclusions and outcome scores were found to not be associated with industry affiliation. Although the results of this study suggest there is no influence of industry association on RCTs involving PRP, it is still necessary to carefully evaluate pertinent corporate affiliations in published literature.

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Multimodal Opioid-Sparing Postoperative Pain Protocol Versus Standard of Care for Patients Undergoing Knee and Shoulder Arthroscopy: A Randomized Controlled Trial

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Summary:
This randomized controlled trial was designed to compare a multimodal opioid-sparing postoperative pain protocol with standard care for patients undergoing knee or shoulder arthroscopy. The primary outcome measures included pain intensity, opioid consumption, and quality of recovery. The study found that the multimodal pain protocol resulted in a reduction of pain intensity and opioid usage compared to standard care, highlighting the potential benefits of this approach for improving patient outcomes and reducing the burden of opioid use in orthopedic surgery.