

Mind, Stress and Recovery

Overview

- Machine learning algorithms can predict psychological distress after total joint arthroplasty [1].
- Early identification of patients at risk for postoperative psychological distress enables targeted behavioral health referral or psychologically informed physical therapy prior to surgery [1].
- Anxiety and depression symptoms are associated with inferior outcomes in patients undergoing total hip arthroplasty [2].
- Patients with anxiety and depression experience major clinical improvement after total hip arthroplasty but have different recovery trajectories [2].
- Tailored perioperative counseling and psychological support are needed for patients with anxiety and depression undergoing total hip arthroplasty [2].
- Patients with lower preoperative mental health scores report similar or greater pain improvements after regenerative peripheral nerve interface surgery for upper-extremity neuromas [3].
- Patients with lower preoperative mental health scores report similar functional improvements after regenerative peripheral nerve interface surgery for upper-extremity neuromas [3].
- Regenerative peripheral nerve interface surgery benefits patients regardless of mental health status [3].
- Anxiety and depression may be more important than the alpha angle or suction seal in hip preservation surgery outcomes [4].
- Unaddressed mental health disorders likely account for the persistent inability to achieve high rates of minimal clinically important difference and substantial clinical benefit in hip preservation surgery [4].
- New-onset anxiety and depression occur in 5.1% of patients within 1 year following arthroscopic shoulder stabilization surgery [5].
- There is a disparity between sexes in physical and psychological recovery, as well as return to sport status, in community-level patients undergoing anterior cruciate ligament reconstruction [6].
- A cognitive behavioral therapy-based intervention resulted in marginal improvements in pain knowledge and psychological distress at 6 weeks for low back pain [8].
- The cognitive behavioral therapy-based intervention did not yield meaningful benefits in pain and function out to 1 year for low back pain [8].

- Patients with major depressive disorder and undiagnosed depression are at risk for inferior outcomes after patellar stabilization surgery [10].
- Patients with underlying mental health disorders may still significantly benefit from medial patellofemoral ligament reconstruction compared to their unaffected counterparts [10].
- Patients with underlying mental health disorders report worse pre- and post-operative PROMIS scores after medial patellofemoral ligament reconstruction compared to unaffected counterparts [10].
- Kinesiophobia is a critical psychological factor that adversely affects functional recovery following arthroscopic Bankart repair [12].
- Kinesiophobia is a critical psychological factor that adversely affects return to sport following arthroscopic Bankart repair [12].
- The Patient-Reported Outcomes Measurement Information System Global Health Instrument Mental Health T-Score has superior performance for identifying the potential for poor outcomes following elective total knee and hip arthroplasty [13].
- The Patient-Reported Outcomes Measurement Information System Global Health Instrument Mental Health T-Score is integrated within standard outcome frameworks [13].
- The Patient-Reported Outcomes Measurement Information System Global Health Instrument Mental Health T-Score is a valuable tool for preoperative psychosocial screening [13].

Anatomy & Pathophysiology

- Machine learning models can predict psychological distress after total joint arthroplasty to enable early identification of at-risk patients [1].
- Patients with anxiety and depression experience major clinical improvement after total hip arthroplasty but have different recovery trajectories compared to those without these symptoms [2].
- Patients with lower preoperative mental health scores report similar or greater pain improvements and similar functional improvements following regenerative peripheral nerve interface surgery for upper-extremity neuromas [3].
- Revision rotator cuff repair patients are more commonly White, have lower mental health status, and have more severe rotator cuff pathology compared to primary rotator cuff repair patients [11].
- Tear severity is not associated with baseline patient-reported outcomes in revision rotator cuff repair patients [11].
- Kinesiophobia adversely affects functional recovery and return to sport following arthroscopic Bankart repair for glenohumeral instability [12].
- A history of depression may not adversely affect patient-reported outcomes after thumb carpometacarpal arthroplasty [15].
- Machine learning models demonstrate excellent predictive power and accuracy in assessing postoperative catastrophic cardiac complications following hip and knee periprosthetic fracture surgery using preoperative parameters [19].

- Adding motor imagery to conservative treatment after distal radius fracture improves function, wrist extension, and hand grip strength compared to conventional treatment alone [20].
- The Hip-RSI Score with a cutoff of 51.7 at 4 months postoperatively demonstrates moderate ability to predict return to sport after surgical repair of a proximal hamstring avulsion [21].
- The Hip-RSI Score for predicting return to sport after proximal hamstring avulsion repair has a sensitivity of 69% and a specificity of 77% [21].
- No operation for reconstruction of a resected part of the skeleton can restore a limb to normal function [22].
- Patient-specific psychological characteristics and personality structure significantly affect functional outcomes after arthroscopically assisted acromioclavicular joint stabilization for acute and chronic injuries at mid-term follow-up [23].

Classification

- Patients with remission or mild fibromyalgia experience more severe symptoms and poorer quality of life than patients with remission or low disease activity rheumatoid arthritis [7].
- Patients with underlying mental health disorders report worse pre- and post-operative PROMIS scores after MPFL-R compared to unaffected counterparts [10].
- Revision rotator cuff repair patients have lower mental health status compared to primary rotator cuff repair patients [11].
- Tear severity is not associated with baseline PROMs in revision rotator cuff repair patients [11].
- The Patient-Reported Outcomes Measurement Information System Global Health Instrument Mental Health T-Score is a valuable tool for preoperative psychosocial screening for poor outcomes following elective total knee and hip arthroplasty [13].
- Adolescent AIS patients' anxiety levels are stable, independent of received therapeutic support [14].
- Central sensitization in chronic nonspecific low back pain can be seen as an excessive reactivity of nociceptive neurons in the central nervous system to normal or subthreshold afferent chronic stimuli in people with certain mental predispositions [16].

Clinical Presentation

- A cognitive-behavioral therapy-based intervention resulted in marginal improvements in pain knowledge and psychological distress at 6 weeks for low back pain, but did not yield meaningful benefits in pain and function out to 1 year [8].
- Revision rotator cuff repair cohorts have lower mental health status compared to primary rotator cuff repair cohorts [11].
- Tear severity was not associated with baseline PROMs in patients undergoing revision rotator cuff repairs [11].

- Kinesiophobia adversely affects functional recovery and return to sport following arthroscopic Bankart repair [12].
- The Patient-Reported Outcomes Measurement Information System Global Health Instrument Mental Health T-Score is a valuable tool for preoperative psychosocial screening for potential poor outcomes following elective total knee and hip arthroplasty [13].
- Adolescent idiopathic scoliosis patients' anxiety levels are stable, independent of received therapeutic support [14].

Investigations

- Such models support early identification of patients at risk for postoperative psychological distress [1].
- Early identification enables targeted behavioral health referral prior to surgery [1].
- Early identification enables psychologically informed physical therapy prior to surgery [1].
- Patients with anxiety and depression experience major clinical improvement after total hip arthroplasty [2].
- Patients with anxiety and depression have different recovery trajectories after total hip arthroplasty [2].
- Tailored perioperative counseling is needed for patients with anxiety and depression undergoing total hip arthroplasty [2].
- Psychological support is needed for patients with anxiety and depression undergoing total hip arthroplasty [2].
- Patients with lower preoperative mental health scores report similar or greater pain improvements after regenerative peripheral nerve interface surgery [3].
- Patients with lower preoperative mental health scores report similar functional improvements after regenerative peripheral nerve interface surgery [3].
- Regenerative peripheral nerve interface benefits patients regardless of mental health status [3].
- Unaddressed mental health disorders likely account for the persistent inability to achieve high rates of minimal clinically important difference in hip preservation surgery [4].
- Unaddressed mental health disorders likely account for the persistent inability to achieve substantial clinical benefit in hip preservation surgery [4].
- There is a disparity between sexes in physical recovery following anterior cruciate ligament reconstruction [6].
- There is a disparity between sexes in psychological recovery following anterior cruciate ligament reconstruction [6].
- There is a disparity between sexes in return to sport status following anterior cruciate ligament reconstruction [6].
- Patients with remission or mild fibromyalgia experience more severe symptoms than patients with remission or low disease activity rheumatoid arthritis [7].

- Patients with remission or mild fibromyalgia experience poorer quality of life than patients with remission or low disease activity rheumatoid arthritis [7].
- Patients with remission or mild fibromyalgia experience more severe symptoms than healthy controls [7].
- Patients with remission or mild fibromyalgia experience poorer quality of life than healthy controls [7].
- A cognitive-behavioral therapy-based intervention resulted in marginal improvements in pain-related knowledge at 6 weeks for low back pain [8].
- A cognitive-behavioral therapy-based intervention resulted in marginal improvements in psychological distress at 6 weeks for low back pain [8].
- A cognitive-behavioral therapy-based intervention did not yield meaningful benefits in pain out to 1 year for low back pain [8].
- A cognitive-behavioral therapy-based intervention did not yield meaningful benefits in function out to 1 year for low back pain [8].
- Patients with major depressive disorder are at risk for inferior outcomes after patellar stabilization surgery [10].
- Patients with undiagnosed depression are at risk for inferior outcomes after patellar stabilization surgery [10].
- Patients with underlying mental health disorders report worse pre-operative PROMIS scores after MPFL-R compared to unaffected counterparts [10].
- Patients with underlying mental health disorders report worse post-operative PROMIS scores after MPFL-R compared to unaffected counterparts [10].
- Patients with underlying mental health disorders may still significantly benefit from MPFL-R compared to their unaffected counterparts [10].
- Revision rotator cuff repair patients are more commonly White than primary rotator cuff repair patients [11].
- Revision rotator cuff repair patients have lower mental health status than primary rotator cuff repair patients [11].
- Revision rotator cuff repair patients have more severe rotator cuff pathology than primary rotator cuff repair patients [11].
- Tear severity was not associated with baseline PROMs in revision rotator cuff repair patients [11].
- Kinesiophobia adversely affects functional recovery following arthroscopic Bankart repair [12].
- Kinesiophobia adversely affects return to sport following arthroscopic Bankart repair [12].
- Music therapy intervention effects on pain and anxiety in adult patients undergoing total shoulder arthroplasty were not dependent on live vs. recorded presentation [17].
- Adding motor imagery to conservative treatment after distal radius fracture improved function compared to conventional treatment alone [20].
- Adding motor imagery to conservative treatment after distal radius fracture improved wrist extension compared to conventional treatment alone [20].

- Adding motor imagery to conservative treatment after distal radius fracture improved hand grip strength compared to conventional treatment alone [20].

Treatment

- Machine learning algorithms can predict psychological distress after total joint arthroplasty to support early identification of at-risk patients [1].
- The differing recovery trajectories of patients with anxiety and depression emphasize the need for tailored perioperative counseling and psychological support [2].
- Regenerative peripheral nerve interface (RPNI) surgery provides similar or greater pain improvements and similar functional improvements regardless of preoperative mental health status [3].
- Sex-based disparities exist in physical and psychological recovery, as well as return to sport status, in community-level patients undergoing anterior cruciate ligament reconstruction [6].
- Distal biceps tendon repair using a cortical button with or without an interference screw provides excellent short- to mid-term clinical and functional outcomes [9].
- Patients with major depressive disorder and undiagnosed depression report worse pre- and post-operative PROMIS scores after patellar stabilization surgery compared to unaffected counterparts [10].
- Kinesiophobia is a critical psychological factor that adversely affects functional recovery and return to sport following arthroscopic Bankart repair [12].
- The Patient-Reported Outcomes Measurement Information System Global Health Instrument Mental Health T-Score is a valuable tool for preoperative psychosocial screening due to its superior performance and integration within standard outcome frameworks [13].
- Adolescent idiopathic scoliosis patients' anxiety levels are stable and independent of received therapeutic support [14].
- Music therapy intervention effects on pain and anxiety in adult patients undergoing total shoulder arthroplasty were not dependent on live versus recorded presentation [17].

Complications

- Patients with lower preoperative mental health scores report similar or greater pain improvements after regenerative peripheral nerve interface (RPNI) surgery for upper-extremity neuromas [3].
- Patients with lower preoperative mental health scores report similar functional improvements after RPNI surgery for upper-extremity neuromas [3].
- RPNI benefits patients regardless of mental health status [3].
- There is a disparity between sexes in physical and psychological recovery, as well as return to sport status, in community-level patients undergoing anterior cruciate ligament reconstruction (ACLR) [6].
- A cognitive behavioral therapy (CBT)-based intervention resulted in marginal improvements in pain knowledge and psychological distress at 6 weeks for low back pain [8].

- The CBT-based intervention did not yield meaningful benefits in pain and function out to 1 year for low back pain [8].
- Risk-stratified care improves pain-related knowledge and reduces psychological distress for low back pain [8].
- Revision rotator cuff repair (RCR) patients are more commonly White than primary RCR patients [11].
- Revision RCR patients have lower mental health status than primary RCR patients [11].
- Revision RCR patients have more severe rotator cuff pathology than primary RCR patients [11].
- Tear severity was not associated with baseline PROMs in revision RCR patients [11].
- A history of depression may not adversely affect patient-reported outcomes after thumb carpometacarpal (CMC) arthroplasty [15].
- A history of anxiety and/or depression is consistently associated with poorer outcomes after arthroscopic hip surgery at 2-year follow-up [18].
- Resilience demonstrates a less consistent and variable association with outcomes after arthroscopic hip surgery [18].
- Machine learning models demonstrate excellent predictive power and accuracy in assessing postoperative cardiac complications following hip and knee periprosthetic fracture surgery using preoperative parameters [19].

Recovery

- Early identification of postoperative psychological distress risk enables targeted behavioral health referral or psychologically informed physical therapy prior to surgery [1].
- The CBT-based intervention for low back pain did not yield meaningful benefits in pain and function out to 1 year [8].
- Tear severity was not associated with baseline patient-reported outcome measures (PROMs) in revision rotator cuff repair patients [11].
- Kinesiophobia is a critical psychological factor that adversely affects functional recovery following arthroscopic Bankart repair for glenohumeral instability [12].
- Kinesiophobia is a critical psychological factor that adversely affects return to sport following arthroscopic Bankart repair for glenohumeral instability [12].

Key Evidence

- [L4] Such models could support early identification of patients at risk for postoperative psychological distress, enabling targeted behavioral health referral or psychologically informed physical therapy prior to surgery. [1] ([10.1016/j.arth.2026.05.039](https://doi.org/10.1016/j.arth.2026.05.039))

- [L2] While these patients experience major clinical improvement after THA, their recovery trajectories differ, emphasizing the need for tailored perioperative counseling and psychological support. [2] ([10.1016/j.arth.2025.06.013](#))
- [L4] Patients with lower preoperative mental health scores reported similar or greater pain improvements and similar functional improvements, suggesting RPNI benefits patients regardless of mental health status. [3] ([10.1016/j.jhsg.2026.100985](#))
- [L5] Unaddressed mental health disorders likely account for the persistent inability to achieve high rates of minimal clinically important difference and substantial clinical benefit in hip preservation surgery. [4] ([10.1002/arj.70034](#))
- [L3] New-onset anxiety and depression occur in 5.1% of patients within 1 year following arthroscopic shoulder stabilization surgery. [5] ([10.1016/j.jseint.2025.101413](#))
- [L2] This study demonstrates the disparity between sexes in physical and psychological recovery, as well as RTS status, in community-level patients undergoing ACLR. [6] ([10.1177/2325967125s00328](#))
- [L4] Despite being in a mild activity or remission stage, RFM patients experience more severe symptoms and poorer QOL than RRA patients. [7] ([10.1186/s12891-025-08323-6](#))
- [Paper] This CORR Insights commentary discusses a secondary analysis of a randomized trial, noting that while a CBT-based intervention resulted in marginal improvements in pain knowledge and psychological distress at 6 weeks, it did not yield meaningful benefits in pain and function out to 1 year. [8] ([10.1097/corr.0000000000003410](#))
- [L3] Both techniques provided excellent short- to mid-term clinical and functional outcomes. [9] ([10.1177/17585732261441889](#))
- [L3] Patients with underlying mental health disorders may still significantly benefit from MPFL-R compared to their unaffected counterparts but will nonetheless report worse pre- and post-operative PROMIS scores. [10] ([10.1016/j.jisako.2026.101080](#))
- [L3] Compared to primary RCR patients, the revision cohort were more commonly White, had lower mental health status and more severe rotator cuff pathology, though tear severity was not associated with baseline PROMs. [11] ([10.1016/j.jse.2026.05.007](#))
- [L3] Kinesiophobia is a critical psychological factor that adversely affects functional recovery and return to sport following arthroscopic Bankart repair. [12] ([10.1186/s12891-026-09567-6](#))
- [L3] Its superior performance and integration within standard outcome frameworks make it a valuable tool for preoperative psychosocial screening. [13] ([10.1016/j.arth.2025.09.034](#))
- [L3] AIS patients' anxiety levels are stable, independent of received therapeutic support. [14] ([10.1186/s12891-026-09645-9](#))
- [L4] These findings suggest that a history of depression may not adversely affect patient-reported outcomes after thumb CMC arthroplasty. [15] ([10.1016/j.jhsg.2026.100989](#))
- [L5] Central sensitization can be seen as an excessive reactivity of nociceptive neurons in the central nervous system to normal or subthreshold afferent chronic stimuli in people with certain mental predispositions. [16] ([10.3390/jcm14020577](#))
- [L2] Findings were not dependent on live vs. recorded presentation. [17] ([10.1016/j.jseint.2025.101438](#))

- [L3] The present study suggests that a history of anxiety and/or depression is consistently associated with poorer outcomes after arthroscopic hip surgery, whereas resilience demonstrates a less consistent and variable association. [18] ([10.1177/23259671251407329](https://doi.org/10.1177/23259671251407329))
- [L3] All models demonstrated excellent predictive power and accuracy in assessing postoperative cardiac complications. [19] ([10.1016/j.arth.2026.04.007](https://doi.org/10.1016/j.arth.2026.04.007))
- [L1] Adding motor imagery to conservative treatment after distal radius fracture improved function, wrist extension, and hand grip strength compared to conventional treatment alone. [20] ([10.1016/j.jht.2025.02.018](https://doi.org/10.1016/j.jht.2025.02.018))
- [L3] This score, with a cutoff of 51.7 at 4 months postoperatively, demonstrated a moderate ability to predict which patients would return to sport, with a sensitivity of 69% and a specificity of 77%. [21] ([10.1177/23259671251389118](https://doi.org/10.1177/23259671251389118))
- [Paper] No operation for reconstruction of a resected part of the skeleton can restore a limb to normal function. [22] ([10.2106/00004623-196446020-00012](https://doi.org/10.2106/00004623-196446020-00012))
- [L4] Patient-specific psychological characteristics and personality structure significantly affect functional outcomes after arthroscopically assisted ACJ stabilization for acute and chronic ACJ injuries at mid-term follow-up. [23] ([10.1002/ksa.70349](https://doi.org/10.1002/ksa.70349))

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