

## Poster #31

### Research Study

Title: "Sleep Alterations Following Elective Shoulder Surgery: A Systematic Review"

Amir Karimi; Joshua Langberg; Michael Stone, MD

Category: Orthopedics; other

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**Introduction and Objective.** Poor sleep quality due to nocturnal pain is increasingly reported as a major symptom in several shoulder pathologies. Sleep disturbance has been reported in up to 89% after rotator cuff tears and is frequently reported as the primary reason for referring a patient to surgery. As a result it is important to understand the impact of shoulder surgery on a patient's sleep quality.

**Methods.** A systematic literature review in accordance with PRISMA guidelines was performed to identify primary research articles reporting the relationship between sleep and shoulder surgery. After the removal of duplicates, the initial query yielded 276 articles, and after applying inclusion and exclusion criteria, 12 articles were included for qualitative synthesis which discusses the relationship between sleep and shoulder surgery.

**Results.** Overall, a total of 1097 patients with 538 males (28.2%) and 1369 females (71.8%) were included. 12 studies evaluated the impact of shoulder surgery on the quality of sleep, with the Pittsburgh Sleep Quality Index (PSQI) as the most commonly used survey. Average preoperative PSQI across studies was 9.9 (poor sleep), and postoperative PSQI scores of 5.4 at 6 months (improved sleep). However, of the nine studies that utilized PSQI, only four reported a mean PSQI score less than 5 postoperatively.

**Conclusions-Implications.** Patients with shoulder pathologies have a poor quality of sleep that improves after shoulder surgery. However, this improvement might not return sleep quality within the normal range, suggesting other factors might be impacting postoperative sleep quality.