



CLINICAL CARE

An Overdue Paradigm Shift

CHIROPRACTIC CARE: THE BEST OPTION FOR TREATING SHOULDERS.

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National and international treatment guidelines follow a common treatment path for patients with subacromial shoulder pain, also called shoulder impingement syndrome. As a first line of care, they recommend over-the-counter medications (e.g., NSAIDs, acetaminophen) and physical therapy elements (e.g., therapeutic rehabilitation, manual therapy).

If the first-line therapies fail, they recommend steroid injections; then surgery if injections fail. The paradigm of these guidelines is that if nonsurgical treatments are unsuccessful, surgery will be there to "save the day." However, current research points in a different direction.

Surgery: Common ... But Ineffective

Painful shoulders pose a substantial socioeconomic burden, accounting for 4.5 million physician visits annually in America.¹ Subacromial pain accounts for up to 70 percent of all shoulder pain problems, and can impair the ability to work and do normal, everyday activities.



Subacromial decompression was introduced in 1972 without high-level evidence as a treatment for subacromial shoulder pain. It is now one of the most common surgical procedures in orthopedics. More than 300,000 rotator-cuff repairs are performed annually in the United States, with annual direct medical costs estimated at more than \$7 billion.²⁻³ However, the effectiveness of this procedure is uncertain. Let's examine the data from two clinical trials.

The Research Doesn't Lie

Beard, et al., conducted a clinical trial to assess the effectiveness of surgical decompression in patients with subacromial shoulder pain.⁴ This study, published in *Lancet*, was a randomized, placebo-controlled, three-group trial. Participants were patients who had subacromial pain for at least three months, but without a full-thickness torn rotator cuff.

Participants were randomly assigned (1:1:1) to arthroscopic subacromial decompression (removing bone spurs and soft tissue), placebo decompression (skin incision and water irrigation), or no treatment.

The graph titled "Shoulder Function Scores" demonstrates the results of the study. Function scores range from 0-100%, with a score of 100 percent indicating no shoulder symptoms or limitations in activities. Scores did not differ between the two surgical groups at six months or 12 months.

Both surgical groups showed a small benefit over no treatment, but real surgery was not better than placebo surgery. *Conclusion: The surgical removal of bone spurs and soft tissue confers no benefit.*

Paavola, et al., performed a randomized, double-blind, controlled trial to assess the efficacy of arthroscopic subacromial decompression by comparing it with diagnostic arthroscopy (a placebo

surgical intervention).⁵ This study was published in the *British Journal of Sports Medicine*. Patients with a full-thickness torn rotator cuff were excluded.

The graph titled "Visual Analogue Scale - Pain" demonstrates the results of this study. The visual analogue scale scores pain from 0 to 100, with 0 denoting no pain. Pain scores did not differ between the two surgical groups at any point in time over a five-year follow-up period. *Conclusion: The surgical removal of bone spurs and soft tissue confers no benefit.*

Surgery in both of these clinical studies failed. Moreover, the surgical complication rate for arthroscopic shoulder procedures is reported as 7.9 percent.⁶ Patients with subacromial shoulder pain lesions should consider a different strategy.

Steroid Injections: No Better

Steroid injections are also not effective in subacromial shoulder pain and can lead to serious adverse events including increased risk of osteoporosis, fracture and collagen necrosis.⁷⁻⁸

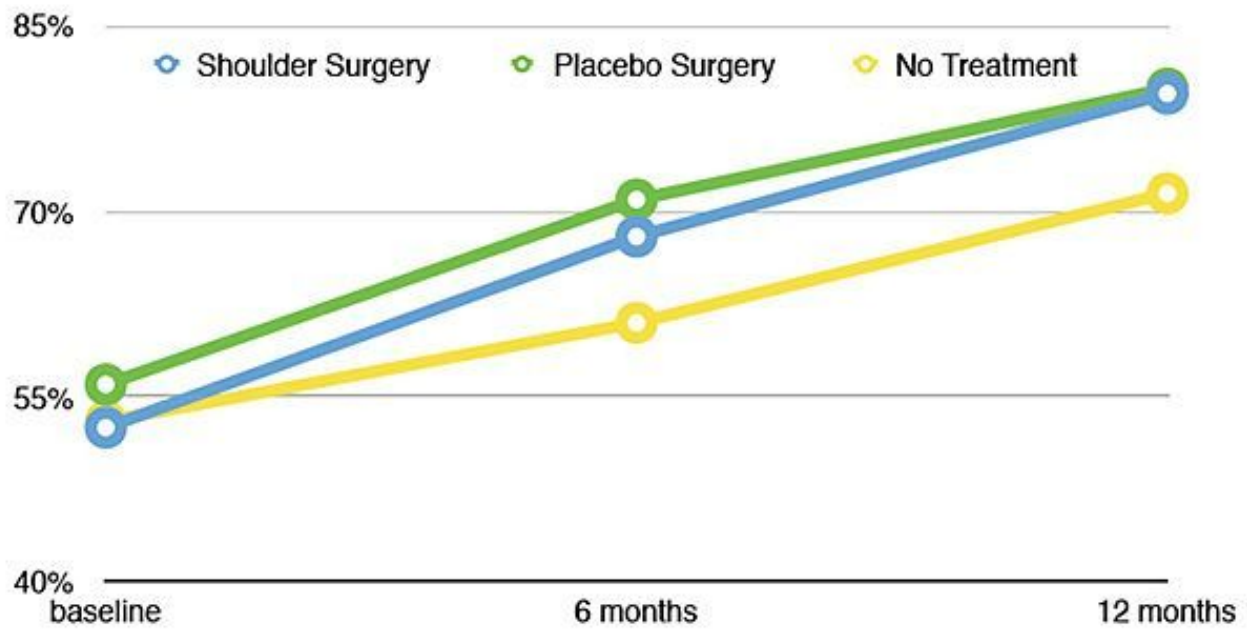
Chiropractic Care: The Superior Choice

Systematic reviews and randomized clinical trials support the following interventions for patients with subacromial pain: manual therapy, therapeutic rehabilitation, acupuncture and low-level laser therapy.⁹⁻¹¹ These interventions can reduce pain, improve function and increase range of motion without serious adverse events. This strategy includes the primary therapies in our chiropractic package of care.

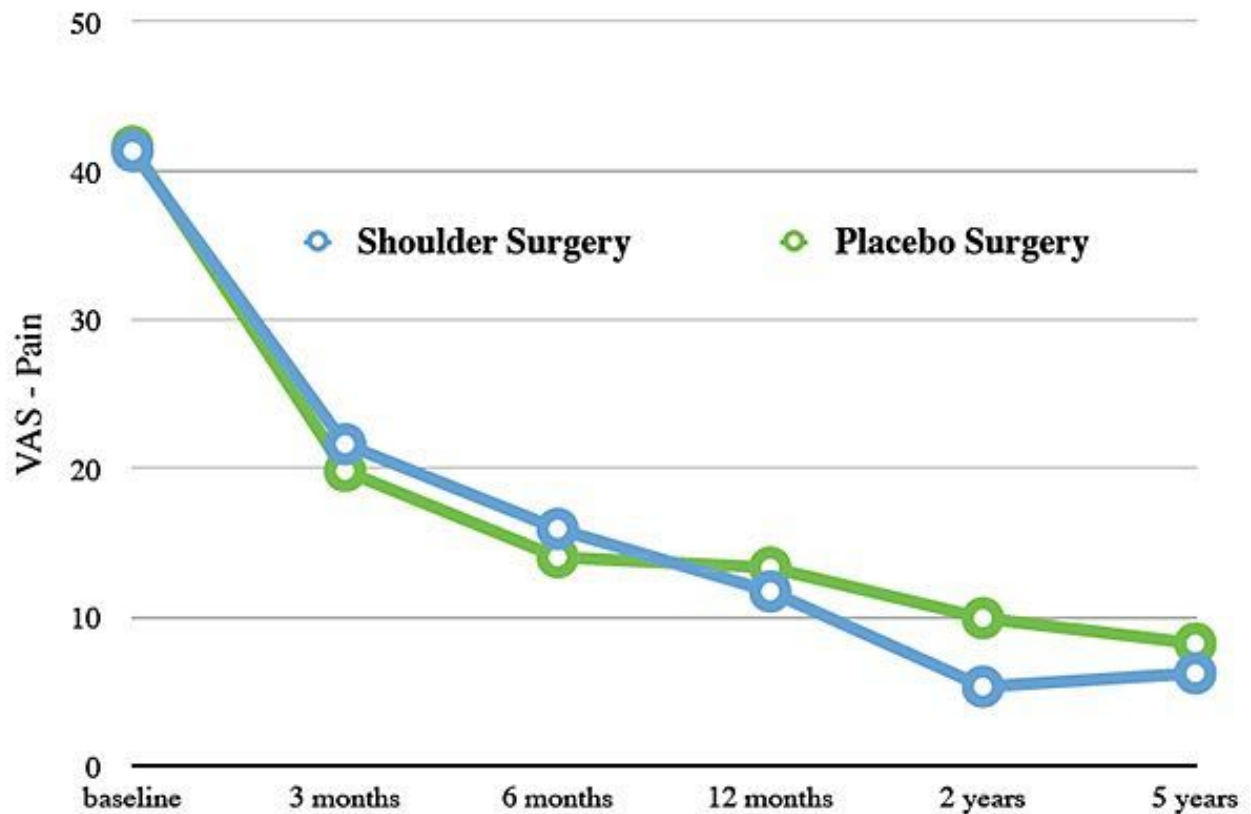
A New Paradigm

Health care professionals and insurance companies need to consider a new paradigm. A conservative package of care for subacromial shoulder pain is the most effective and safe option for patients, and surgery should *not* be considered as another option. Although a few patients (those with a full-thickness torn rotator cuff) may need surgery, most patients with subacromial shoulder pain do not.

Shoulder Function Scores



Visual Analogue Scale - Pain



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