

[IMAGE]

Surgery: No Added Benefit

For musculoskeletal conditions, conservative care is your best bet.

By Editorial Staff

Musculoskeletal means anything involving the muscles, ligaments, tendons, bones, joints or soft tissue. Your doctor of chiropractic is an expert in treating musculoskeletal conditions without drugs or surgery. But too often, surgery is a suggested treatment route for MSK conditions, even though the research suggests surgery is no more effective than nonsurgical treatment.

A 2022 review and analysis of previous studies evaluated the potential benefits vs. harms of various interventions with and without surgery for non-fracture musculoskeletal (MSK) conditions in adults.¹ One hundred studies involving a total of 12,645 patients were selected, representing 28 different conditions at nine body sites including the neck, low back, shoulder, pelvis, hip and knee.

The review authors sought to estimate the benefits and harms of various interventions with and without surgery by looking at outcomes for patient-reported pain, physical function, quality of life, and serious adverse events (SAEs) for some of the more common musculoskeletal conditions.

surgery - Copyright © Stock Photo / Register Mark Except for some spinal conditions, pain data on nine of 13 conditions, function data on 11 of 11 conditions and quality-of-life data on nine of nine conditions found *no clinically relevant differences between interventions with and without surgery*. For SAEs, 13 of 16 conditions with data; and for death, 16 of 16 conditions, found *no differences in harms between surgery vs. no surgery*.

Of the remaining four of 13 conditions with pain data, while surgery appeared to lead to a greater improvement of at least moderate effect size for cervical disc herniation (three studies), lumbar spinal stenosis (five studies), sacroiliac joint pain (two studies), and chronic low back pain (five studies), *it did not demonstrate greater improvement in either function or quality of life*.

In addition, only 14 percent of studies comparing surgery to placebo surgery, nonsurgical intervention or no intervention demonstrated statistically significant and clinically relevant benefits for surgery.

This isn't the first time research has suggested most musculoskeletal conditions should be treated nonsurgically, rather than surgically. Per a 2021 study, "The low certainty of evidence does not support recommending surgery over nonsurgical alternatives for most MSK conditions with available RCTs. The lack of supporting evidence for surgery was recently confirmed by an umbrella review of meta-analyses."²

The study notes that MSK conditions are the second most common indication for surgery worldwide, exceeded only by unintentional injuries. A previous systematic review suggested MSK surgeries have fewer supporting RCTs compared to other surgical procedures, and that less than 1 percent compared surgery to not performing the surgical procedure.³

And the authors of a 2017 study stated, "By quantifying benefits and harms and assessing risk of bias, our study adds weight to previous research and suggests that, for many conditions, best practice nonsurgical interventions are viable alternatives to surgery. Even for patients where nonsurgical treatment is not sufficiently effective, evidence supporting the effects of surgery is missing. For some conditions, surgery is even recommended against by clinical guidelines and does not provide additional benefit to nonsurgical treatment."⁴

Interestingly, some studies have demonstrated that *even after surgery, the costs⁵ and need for further nonsurgical care⁶⁻⁷ can be high*, suggesting that undergoing successful surgery in terms of improved pain and function is not necessarily associated with reduced societal burden of MSK conditions; or does not necessarily result in the surgical intervention being more cost-effective as an alternative or in addition to nonsurgical intervention.^{6, 8}

These results, when combined with previous research, further support nonsurgical interventions as first-line care for musculoskeletal conditions for pain reduction, increased physical function, improved quality of life and fewer serious adverse events.

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