

CHIROPRACTIC (GENERAL)

## **Before Your Patient's Surgery**

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Unfortunately, major surgery (involving hospitalization and general anesthesia) is something a number of your patients will experience at some point in their lives. While successful surgery often saves and enhances lives, it is a trauma to the body.

Chiropractic adjustments can be beneficial "prehab" to help your patient's musculoskeletal system prepare for the biomechanical stresses of surgical positioning, rearranged tissue and bed rest. What is not always addressed is the impaired cognitive function (including memory loss, attention deficit, and confusion) that is a common sequel of major surgery, especially in patients over the age

of 60.<sup>1</sup>

While spontaneous recovery from cognitive impairment usually occurs within 30 days after surgery, a significant minority of patients will experience months or years of dysfunction.<sup>2</sup>

Another common post-operative complication is loss of breathing capacity. Partial collapse of a lung or a lobe of a lung (atelectasis) afflicts approximately 90 percent of patients undergoing general anesthesia.<sup>3</sup> The risk of postsurgical atelectasis increases with obesity.<sup>4</sup>

Postsurgical vestibular problems are frequent as well. Vertigo and dizziness may result from adverse reactions to anesthesia or patient positioning during surgery.<sup>5</sup>

An assessment of your patient's presurgical status including cognitive, respiratory, and vestibular function can provide a useful baseline.

One dimension of cognitive function – attention and short-term memory – can be quickly and easily tested with reverse digit span. I discussed this test in a previous article.<sup>6</sup> As noted then, reverse digit span often improves following chiropractic adjustment.

Simple spirometers are quite affordable. These enable the practitioner to quickly measure forced vital capacity – a useful indicator of respiratory function.<sup>7</sup>

The ability of a patient to balance on one leg for 30 seconds or more is a well-accepted measure related to vestibular function.<sup>8-9</sup>

Once the postsurgical patient can resume chiropractic care, restoration of presurgical reverse digit span, forced vital capacity and single-leg balance time are reasonable goals of care in addition to your customary outcome measures.

For those of you interested in clinical research, there is a need for well-described case reports involving chiropractic care before and after surgery. The acceptance of chiropractic care for surgical "prehab" and rehab will become a little easier with each publication. Feel free to get in touch with me or with the research department of your chiropractic alma mater if you would like assistance with the publication process.

## References

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