

1-2020

Static v. Expandable TLIF Cage Outcomes

Harrison Pajovich

Thomas Jefferson University, harrison.pajovich@jefferson.edu

Ryan Nachwalter

Thomas Jefferson University, ryan.nachwalter@jefferson.edu

Lohit Velagapudi

Thomas Jefferson University, lohit.velagapudi@jefferson.edu

Joseph Zarowin

Thomas Jefferson University, joseph.zarowin@jefferson.edu

Alexander R. Vaccaro, MD, PhD

Thomas Jefferson University, Alex.Vaccaro@rothmaninstitute.com

Follow this and additional works at: https://jdc.jefferson.edu/si_ctr_2022_phase1



Part of the [Orthopedics Commons](#), and the [Translational Medical Research Commons](#)

[Let us know how access to this document benefits you](#)

Recommended Citation

Pajovich, Harrison; Nachwalter, Ryan; Velagapudi, Lohit; Zarowin, Joseph; and Vaccaro, MD, PhD, Alexander R., "Static v. Expandable TLIF Cage Outcomes" (2020). *Phase 1*. Paper 26.

https://jdc.jefferson.edu/si_ctr_2022_phase1/26

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Phase 1 by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.

Static v. Expandable TLIF Cage Outcomes

Harrison Pajovich, Ryan Nachwalter**, Lohit Velagapudi**, Joseph Zarowin & Alexander Vaccaro MD, PhD*.

(*) indicates primary project advisor

(**) indicates another student who is declaring the same project as primary for SI

Static cages were introduced in the 1990s as a solution to degenerative spondylolisthesis, recurrent disc herniation and spinal stenosis. As this procedure was popularized, a new class of expandable Transforaminal Lumbar Interbody Fusion devices was introduced to further improve outcomes that will be studied in this project. It will be explored how expandable cages compare to static cages in TLIF procedures in patient-reported outcomes, complications and restoration of appropriate lumbar lordosis.

We conducted a retrospective cohort review comparing those who received expandable and static cages. Eligible patients received TLIF procedure at the Rothman Institute, were ≥ 18 years of age and had radiographic follow-up at 3 months and 1 year postoperatively. Outcomes were measured in lumbar lordosis via calculating angles via radiographic images preoperatively and 3 month and 1 year postoperatively as well as pre- and post-operative SF-12 surveys.

At this time, data acquisition is ongoing and no preliminary data has been generated. However, we anticipate better patient reported outcomes and greater and sustained restoration of Lumbar Lordosis in patients who received expandable cages. Data collection is scheduled to be completed shortly.

Once completed, this will be a study of greater magnitude and will address the shortage of investigations into the surgical outcomes of static and expandable cages and clarify the theorized benefits of expandable cages. Recent emphasis has been placed on restoring appropriate lumbar lordosis in fusion surgeries and this project was designed to investigate lordosis at different time posts as compared to patient-reported outcomes.