

Cervical titanium cage

while [PEEK cages](#) and [titanium cages](#) exhibit unique biomaterial properties, a study of Canseco et al. showed that there were no significant differences with respect to [patient-reported outcomes](#) or radiographic [outcomes](#) between the 2 groups at the 1-year follow-up time point ¹⁾.

Studies comparing cervical [titanium cages](#) and [PEEK cages](#) are rare in the literature. Chou's team retrospectively compared the results of anterior cervical fusion using titanium cages, PEEK cages and tricortical bone grafts ²⁾. They noticed a better fusion rate and less subsidence in the PEEK cages group. However, the study only enrolled a small number of patients and cervical spinal function was not evaluated. In a systematic review by Kersten who compared a PEEK cage with a bone graft, titanium cage, and carbon fiber cage, no difference was found between PEEK and titanium cage ³⁾.

A [meta-analysis](#) indicated no significant difference in functional and radiographic performance between the [PEEK](#) and [titanium cages](#), although more subsidence occurred in the titanium cage group. More high-quality studies are needed to confirm these results to offer more information for the choice in clinical practice ⁴⁾.

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Canseco JA, Karamian BA, Patel PD, Divi SN, Timmons T, Hallman H, Nachwalter R, Lee JK, Kurd MF, Anderson DG, Rihn JA, Hilibrand AS, Kepler CK, Vaccaro AR, Schroeder GD. PEEK Versus Titanium Static Interbody Cages: A Comparison of 1-Year Clinical and Radiographic Outcomes for 1-Level TLIFs. Clin Spine Surg. 2021 Oct 1;34(8):E483-E493. doi: 10.1097/BSD.0000000000001201. PMID: 34369911.

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Chou YC, Chen DC, Hsieh WA, Chen WF, Yen PS, Harnod T, Chiou TL, Chang YL, Su CF, Lin SZ, Chen SY. Efficacy of anterior cervical fusion: comparison of titanium cages, polyetheretherketone (PEEK) cages and autogenous bone grafts. J Clin Neurosci. 2008 Nov;15(11):1240-5. doi: 10.1016/j.jocn.2007.05.016. Epub 2008 Sep 17. PubMed PMID: 18801658.

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Li ZJ, Wang Y, Xu GJ, Tian P. Is PEEK cage better than titanium cage in anterior cervical discectomy and fusion surgery? A meta-analysis. BMC Musculoskelet Disord. 2016 Sep 1;17:379. doi: 10.1186/s12891-016-1234-1. PubMed PMID: 27585553; PubMed Central PMCID: PMC5009677.

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