

Unconstrained implant

- 1: Lang A, Lener S, Grassner L, Abramovic A, Thomé C, Päsler D, Lehmberg J, Schär R, Hartmann S. Clinical and radiological outcome 1-year after cervical total disc replacement using the Signus ROTAIO - Prosthesis. *Eur Spine J*. 2022 Oct 11. doi: 10.1007/s00586-022-07416-3. Epub ahead of print. PMID: 36219329.
- 2: Fleck S, Lang A, Lehmberg J, Landscheidt JF, Gerlach R, Rathert J, Ulrich C, Schär RT, Hartmann S, Mueller JU, Thome C. Prospective Multicenter Trial of Cervical Arthroplasty with the ROTAIO® Cervical Disc Prosthesis. *Global Spine J*. 2022 Aug 5;21925682221109563. doi: 10.1177/21925682221109563. Epub ahead of print. PMID: 35929409.
- 3: DiCesare JAT, Tucker AM, Say I, Patel K, Lanman TH, Coufal FJ, Millard J, Deckey JE, Shetgeri S, McBride DQ. Mechanical failure of the Mobi-C implant for artificial cervical disc replacement: report of 4 cases. *J Neurosurg Spine*. 2020 Jul 31;1-7. doi: 10.3171/2020.5.SPINE19442. Epub ahead of print. PMID: 32736353.
- 4: Choi H, Baisden JL, Yoganandan N. A Comparative in vivo Study of Semi- constrained and Unconstrained Cervical Artificial Disc Prostheses. *Mil Med*. 2019 Mar 1;184(Suppl 1):637-643. doi: 10.1093/milmed/usy395. PMID: 30901460.
- 5: Hu K, Jamali M, Moses ZB, Ortega CA, Friedman GN, Xu W, Williams ZM. Decoding unconstrained arm movements in primates using high-density electrocorticography signals for brain-machine interface use. *Sci Rep*. 2018 Jul 12;8(1):10583. doi: 10.1038/s41598-018-28940-7. PMID: 30002452; PMCID: PMC6043557.
- 6: Bertholet J, Worm E, Høyer M, Poulsen P. Cone beam CT-based set-up strategies with and without rotational correction for stereotactic body radiation therapy in the liver. *Acta Oncol*. 2017 Jun;56(6):860-866. doi: 10.1080/0284186X.2017.1288925. Epub 2017 Feb 17. PMID: 28464747.
- 7: Toth JM, Foley KT, Wang M, Seim HB 3rd, Simon Turner A. Is lumbar facet fusion biomechanically equivalent to lumbar posterolateral onlay fusion? *J Neurosurg Spine*. 2017 May;26(5):586-593. doi: 10.3171/2016.10.SPINE16649. Epub 2017 Feb 3. PMID: 28156207.
- 8: Bostelmann R, Steiger HJ, Cornelius JF. Effect of Annular Defects on Intradiscal Pressures in the Lumbar Spine: An in Vitro Biomechanical Study of Discectomy and Annular Repair. *J Neurol Surg A Cent Eur Neurosurg*. 2017 Jan;78(1):46-52. doi: 10.1055/s-0035-1570344. Epub 2016 Apr 28. PMID: 27123747.
- 9: Obernauer J, Landscheidt J, Hartmann S, Schubert GA, Thomé C, Lumenta C. Cervical arthroplasty with ROTAIO® cervical disc prosthesis: first clinical and radiographic outcome analysis in a multicenter prospective trial. *BMC Musculoskelet Disord*. 2016 Jan 12;17:11. doi: 10.1186/s12891-016-0880-7. PMID: 26759165; PMCID: PMC4711173.
- 10: Healy AT, Sundar SJ, Cardenas RJ, Mageswaran P, Benzel EC, Mroz TE, Francis TB. Zero-profile hybrid fusion construct versus 2-level plate fixation to treat adjacent-level disease in the cervical spine. *J Neurosurg Spine*. 2014 Nov;21(5):753-60. doi: 10.3171/2014.7.SPINE131059. Epub 2014 Aug 29. PMID: 25170655.
- 11: Park SB, Kim KJ, Jin YJ, Kim HJ, Jahng TA, Chung CK. X-Ray-based Kinematic Analysis of Cervical Spine According to Prosthesis Designs: Analysis of the Mobi C, Bryan, PCM, and Prestige LP. *J Spinal*

Disord Tech. 2015 Jun;28(5):E291-7. doi: 10.1097/BSD.0b013e318288a923. PMID: 23429318.

12: Kang H, Park P, La Marca F, Hollister SJ, Lin CY. Analysis of load sharing on uncovertebral and facet joints at the C5-6 level with implantation of the Bryan, Prestige LP, or ProDisc-C cervical disc prosthesis: an in vivo image- based finite element study. Neurosurg Focus. 2010 Jun;28(6):E9. doi: 10.3171/2010.3.FOCUS1046. PMID: 20568924.

13: Uribe JS, Ramos E, Youssef AS, Levine N, Turner AW, Johnson WM, Vale FL. Craniocervical fixation with occipital condyle screws: biomechanical analysis of a novel technique. Spine (Phila Pa 1976). 2010 Apr 20;35(9):931-8. doi: 10.1097/BRS.0b013e3181c16f9a. PMID: 20375778.

14: Chung SK, Kim YE, Wang KC. Biomechanical effect of constraint in lumbar total disc replacement: a study with finite element analysis. Spine (Phila Pa 1976). 2009 May 20;34(12):1281-6. doi: 10.1097/BRS.0b013e3181a4ec2d. PMID: 19455003.

15: Moon SM, Ingallhalikar A, Highsmith JM, Vaccaro AR. Biomechanical rigidity of an all-polyetheretherketone anterior thoracolumbar spinal reconstruction construct: an in vitro corpectomy model. Spine J. 2009 Apr;9(4):330-5. doi: 10.1016/j.spinee.2008.11.012. Epub 2009 Jan 6. PMID: 19129010.

16: Cao A, Thompson RC, Dumpuri P, Dawant BM, Galloway RL, Ding S, Miga MI. Laser range scanning for image-guided neurosurgery: investigation of image-to- physical space registrations. Med Phys. 2008 Apr;35(4):1593-605. doi: 10.1118/1.2870216. PMID: 18491553; PMCID: PMC2811558.

17: Kelly ME, Furlan AJ, Fiorella D. Recanalization of an acute middle cerebral artery occlusion using a self-expanding, reconstrainable, intracranial microstent as a temporary endovascular bypass. Stroke. 2008 Jun;39(6):1770-3. doi: 10.1161/STROKEAHA.107.506212. Epub 2008 Apr 3. PMID: 18388338.

18: Niemeyer TK, Koriller M, Claes L, Kettler A, Werner K, Wilke HJ. In vitro study of biomechanical behavior of anterior and transforaminal lumbar interbody instrumentation techniques. Neurosurgery. 2006 Dec;59(6):1271-6; discussion 1276-7. doi: 10.1227/01.NEU.0000245609.01732.E4. PMID: 17277690.

19: Sekhon LH. Cervical arthroplasty in the management of spondylotic myelopathy: 18-month results. Neurosurg Focus. 2004 Sep 15;17(3):E8. doi: 10.3171/foc.2004.17.3.8. PMID: 15636564.

20: Gebhard F, Kinzl L, Arand M. Computerassistierte Chirurgie [Computer- assisted surgery]. Unfallchirurg. 2000 Aug;103(8):612-7. German. doi: 10.1007/s001130050593. PMID: 10986903.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=unconstrained_implant

Last update: **2024/06/07 02:50**

