
DILIP K. SENGUPTA, MD, Dr. Med

PUBLICATIONS

Original Articles:

1. Ha AS, Hong DY, Coury JR, Luzzi AJ, Yerukhimov AL, Kim J, Huang P, Sengupta DK. Biomechanical Evaluation of a Dynamic Stabilization System for the Prevention of Proximal Junctional Failure in Adult Deformity Surgery. *Spine* 2021 Mar 15;46(6):E356-E363.
2. Sengupta DK Clinical Incidence of PJK/ASD in Adult Deformity Surgery: A Comparison of Rigid Fixation and Semirigid Fixation-Semirigid. *Spine* 2016 Apr;41 Suppl 7:S37-8
3. Sengupta DK Functional and radiological outcome in patients undergoing a three-level corpectomy for multilevel cervical spondylotic myelopathy and ossified posterior longitudinal ligament. *Neurol India*. 2016 Jan-Feb;64(1):23-4
4. Sengupta DK, Fan H. The basis of mechanical instability in degenerative disc disease: a cadaveric study of abnormal motion versus load distribution. *Spine (Phila Pa 1976)*. 2014 Jun 1;39(13):1032-43
5. Huang P, Sengupta DK. How fast pain, numbness, and paresthesia resolves after lumbar nerve root decompression: a retrospective study of patient's self-reported computerized pain drawing. *Spine (Phila Pa 1976)*. 2014 Apr 15;39(8):E529-36.
6. Sengupta DK, Bucklen B, Ingalhalikar A, Muzumdar A and Khalil S. Does Semi-Rigid Instrumentation Using Both Flexion and Extension Dampening Spacers Truly Provide an Intermediate Level of Stabilization?- *Adv Orthop*. 2013;2013:738252. doi: 10.1155/2013/738252. Epub 2013 Apr 11.
7. Sengupta DK, Bucklen B, McAfee PC, Nichols J Angara R, and Khalil S. The Comprehensive Biomechanics and Load-Sharing of Semi-rigid PEEK and Semi-Rigid Posterior Dynamic Stabilization Systems. *Adv Orthop*. 2013;2013:745610. Epub 2013 Aug 4.
8. Sengupta DK, Demetropoulos CK, Herkowitz HN. Instant axis of rotation of L4-5 motion segment--a biomechanical study on cadaver lumbar spine. *J Indian Med Assoc*. 2011 Jun;109(6):389-90, 392-3, 395.
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10. Pearson AM, Spratt KF, Genuario J, McGough W, Kosman K, Lurie J, Sengupta DK. Precision of lumbar intervertebral measurements: does a computer-assisted technique improve reliability? *Spine* 2011 Apr 1;36(7):572-80.
11. Loftus RW, Yeager MP, Clark JA, Brown JR, Abdu WA, Sengupta DK, Beach ML. Intraoperative ketamine reduces perioperative opiate consumption in opiate-dependent patients with chronic back pain undergoing back surgery. 2010 Sep;113(3):639-46
12. Demetropoulos CK, Sengupta DK, Knaub M, Wiater BP, Abjornson C, Truumees E, and Herkowitz HN. Biomechanical Evaluation of the Kinematics of the cadaver lumbar spine following Disc Replacement with the Prodisc-L Prosthesis *Spine*. 2010 Jan 1;35(1):26-31.
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15. Sengupta DK, Truumees E, Patel CK, Kazmierczak C, Hughes B, Elders G, Herkowitz HN. Outcome of local bone versus autogenous iliac crest bone graft in the instrumented posterolateral fusion of the lumbar spine. *Spine*. 20;31(9):985-91, Apr 2006.
16. Sengupta DK, Mulholland RC. Fulcrum assisted soft stabilization system: a new concept in the surgical treatment of degenerative low back pain. *Spine*. 1;30(9):1019-29; discussion 1030, May 2005.
17. U. Debnath , J. McConnell , D. Sengupta , S. Mehdian , J. Webb. Results of hemivertebrectomy and fusion for symptomatic thoracic disc herniation. *European Spine Journal*. E-publication
18. Sengupta DK, Mehdian SMH, Eisenstein SM, McConnell JR, Webb JK. Pelvic or Lumbar fixation for the surgical management of scoliosis in Duchenne Muscular Dystrophy. *Spine*. Sept 15; 27:2072-2079
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22. Sengupta DK, Khazim R, Grevitt MP, Webb JK. Flexion osteotomy of the cervical spine: a new technique for correction of iatrogenic extension deformity in ankylosing spondylitis. *Spine* 2001 May 1;26(9):1068-72
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31. Sengupta DK, Gupta S. Chloroquine-Phosphate in the treatment of Rheumatoid Arthritis. *Bull Indian Rheum Assn* 1987;3(2):44-49
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Review articles:

1. Sengupta DK. Spino-Pelvic Balance–JBJS Reviews, 2014 Aug;2(8):e4.
<http://dx.doi.org/10.2106/JBJS.RVW.M.00115>
2. Sengupta DK, Herkowitz HN. Pedicle screw-based posterior dynamic stabilization: literature review. *Adv Orthop*. 2012;2012:424268. doi: 10.1155/2012/424268. Epub 2012 Nov 28
3. Lotz JC, Haughton V, Boden SD, An HS, Kang JD, Masuda K, Freemont A, Berven S, Sengupta DK, Tanenbaum L, Maurer P, Ranganathan A, Alavi A, [Marinelli NL](#). [New treatments and imaging strategies in degenerative disease of the intervertebral disks](#). *Radiology*. 2012 Jul;264(1):6-19. Review.
4. Mirza S, Sengupta DK, Coe M. Operative Treatment for Degenerative Disk Disease and Chronic Back Pain: An Evidence-Based Review. *Seminars in spine surgery – eds. Wiesel SW and Boden SD*. 2010
5. Torretti J, Sengupta DK - Cervical Spine Trauma: Review. *Indian J Orthop*. 2007 Dec 41(4):255-267
6. Courville X, Torretti J, Sengupta DK. Dynamic stabilization: Principles and Current Clinical Practice, *Seminars in spine surgery –Axial Low Back pain* 2008 Jun 20(2):146-153
7. Sengupta DK, Calore B. Evaluation and initial management of cervical spine injuries. *Seminars in Spine Surgery-Cervical Spine Trauma* 2005 Jun17(2):67-72
8. Sengupta DK. Dynamic stabilization devices in the treatment of low back pain. Review. *Neurol India*. 2005 Dec; 53(4):466-74
9. Sengupta, DK. Herkowitz, HN. Degenerative spondylolisthesis: review of current trends and controversies. *Spine*. 2005 Mar15;30(6 Suppl):S71-81
10. Sengupta, DK. Neglected Spinal Injuries. *Clin Orthop Res*.2005 (431):92-103
11. Sengupta DK. Dynamic Stabilization Devices in the Treatment of Low Back pain. *Orthop Clin North Am*. 2004 Jan;35(1):43-56
12. Sengupta DK, Herkowitz HN. Lumbar spinal stenosis. Treatment strategies and indications for surgery. *Orthop Clin North Am*. 2003 Apr;34(2):281-95.
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Editorials

1. Sengupta DK and Webb JK. Scoliosis - The current concepts. *Indian J Orthop* 2010 Jan;44(1):5-8
2. Sengupta DK and Garfin SR. Trauma -Biomechanical Force and Morphology – Interactive Educational Program for Spine. www.spine-iep.com/iep 2009

Comments / Discussion / Points of Views:

1. Sengupta DK. Letters to Editor: Re: Schwab F, Ungar B, Blondel B, et al. Scoliosis research society—Schwab adult spinal deformity classification—a validation study. *Spine* 2012; 37:1077—82. *Spine* 2012 Sep 15;37(20):1790
2. Point of view: Cluster Analysis as a Method for Determining Size Ranges for Spinal Implants: Disc Lumbar Replacement Prosthesis Dimensions from Magnetic Resonance Images – in press
3. Point of view: Dynamic stabilization in addition to decompression for lumbar spinal stenosis with degenerative spondylolisthesis.- *Spine*. 2006 Feb 15;31(4):450
4. Point of View: Comparison of Smith-Petersen versus pedicle subtraction osteotomy for the correction of fixed sagittal imbalance. *Spine*. 2005 Sep 15;30(18):2030-7; discussion 2038.
5. Point of view: A prospective, randomized, multicenter Food and Drug Administration investigational device exemption study of lumbar total disc replacement with the CHARITE artificial disc versus lumbar fusion: part II: evaluation of radiographic outcomes and correlation of surgical technique accuracy with clinical outcomes. *Spine*. 2005 Jul 15;30(14):1576-83; discussion E388-90.
6. Point of view: A prospective, randomized, multicenter Food and Drug Administration investigational device exemptions study of lumbar total disc replacement with the CHARITE artificial disc versus lumbar fusion: part I: evaluation of clinical outcomes. *Spine*. 2005 Jul 15;30(14):1565-75; discussion E387-91.
7. Van Royen BJ. (Comment), Sengupta DK (Reply) A new technique for correction of an iatrogenic extension deformity in ankylosing spondylitis. *Spine* 2002 Feb 1;27(3):330

Edited Book:

1. Dynamic Reconstruction of the Spine 2nd edition –Thieme, New York, editors: Kim DH, Sengupta DK – 2015.

Book Chapters:

1. Sengupta DK, Ghosh MS. Development and design on implants for fracture management. pp254-261. In. Sahay & Saxena eds: **Biomechanics**. Wiley Eastern Ltd, New Delhi, 1988
2. Mulholland RC, Sengupta DK. Injuries to the spine below neck. In. Ritchie A. ed. **Medical evidence in whiplash Cases**, Sweet & Maxwell, London, 1998
3. Webb JK, Sengupta DK. How do I do it- Osteotomy of the Cervico-thoracic region. In. Vaccaro AR, Albert TJ eds: **Tricks of the Trade of Spine Surgery**. Thieme, New York, 2002
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6. Sengupta DK & Herkowitz HN. Degenerative lumbar Spondylolisthesis with stenosis- Decompression with instrumented fusion. In Wiesel and Herkowitz et al eds: **The Lumbar Spine 2nd Ed.** Published by ISSLS LWW, Philadelphia, 2004.
7. Sengupta DK. Dynamic Stabilization - The non-fusion techniques in the surgical treatment of low back pain. In Wiesel and Herkowitz et al eds: **The Lumbar Spine 2nd Ed.** Published by ISSLS, LWW, Philadelphia 2004
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9. Sengupta DK. Instantaneous Axis of Rotation and its Clinical Importance in a Healthy Lumbar Functional Unit. In **Roundtables in Spine Surgery.** Goel VK and Panjabi MM eds. Quality Medical Publishing Inc. St. Louis 2004
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12. Sengupta DK. Dynamic Stabilization devices in the treatment of low back pain. In Guyer RD & Hochschuler SH eds. **Spine Arthroplasty- A New Era in Spine Care.** QMP, St. Louis 2005
13. Sengupta DK & Fischgrund J. Lumbar Stenosis; **Essentials in Orthopaedics: Spine.** Eds. Garfin S. and Bono C.M. Lippincott, William & Wilkins. Philadelphia 2005
14. Sengupta DK, Herkowitz HN. Complications in anesthesia administration and positioning for spinal surgery. In Vaccaro A ed.: **Complications of Pediatric and Adult Spinal Surgery.** Marcel Dekker, Inc. New York, NY, 2005.
15. Sengupta DK & Herkowitz HN. The Rheumatoid Spine; **Spine Core Knowledge in Orthopaedics** Ed Alexander Vaccaro, Elsevier-Mosby, Philadelphia 2005
16. Sengupta DK. Spinal Injections for Diagnosis and Treatment of Chronic Neck Pain. In monograph on 'Neck Pain' eds. Fischgrund J. published by the **American Academy of Orthopaedic Surgeons** at the AAOS Annual Meeting 2004.
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18. Sengupta DK, Herkowitz HN. Non-fusion-The physiologic solution. In Maxwell JH. eds. **Non-Fusion Techniques for the Spine: Motion Preservation & Balance,** Quality Medical Publishing, Inc., St. Louis, MO 2006.

19. Sengupta DK, Pimenta L, Diaz R. DSS-Minimally invasive posterior dynamic stabilization system. In Kim DH, Cammisa FP, and Fessler RG eds: **Dynamic Reconstruction of the Spine**. Thieme, New York, 2006.
20. Sengupta DK. Rationale for Dynamic Stabilization II - SoftFlex™ Flexible Rod in Dynamic Reconstruction of the Spine. In Kim DH, Cammisa FP, and Fessler RG eds: **Dynamic Reconstruction of the Spine**. Thieme, New York, 2006.
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25. Sengupta DK. Posterior Dynamic Stabilization – **Rothman and Simeone – The Spine, 6th ed.** Herkowitz HN, Garfin SR, Eismont FJ, Bell GR eds. Elsevier, Philadelphia – 2010
26. Sengupta DK. Cervical spine injuries – In Kulkarni GS ed – **Text Book of Orthopedics and Trauma**. 2nd ed **Jaypee** New Delhi 2008
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28. Demetropoulos CK, Sengupta DK, Herkowitz HN. Disk Arthroplasty Using the Prodisc-L® Total Disk Replacement. In **Spinal Arthroplasty with DVD: The Preservation of Motion**. Vaccaro AR, Papadopoulos S, Traynelis VC, Haid RW, Sasso, RC eds. Saunders-Elsevier, Philadelphia 2007
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31. Sengupta DK. Adult Spinal Deformity. In **Orthopaedic Knowledge Update: Spine 4** **Raj D. Rao, MD, and Matthew Smuck, MD, Eds. –AAOS, Chicago. January 2012**