CURRICULUM VITAE



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EDUCATION:

- 1998 M.D. Wonju college of Medicine, Yonsei University, Korea
- 2002 M.S. College of Medicine, Yonsei University, Korea
- 2005 A bachelor's degree, Dept of Media arts and sciences, Open University, Korea
- 2010 Ph.D. College of Medicine, Yonsei University, Korea

PROFESSIONAL ACTIVITES:

1998-1999	Internship, Ewha medical center, Ewha university.
1999-2002	Resident, Department of Neurosurgery, Wonju Severance Hospital,
	Yonsei University
2002-2005	Army Surgeon, Department of Neurosurgery, Korean Millitary Manpower
	Admistration office
2005-2006	Clinical Fellow, Dept. of Spine-neurosurgery, Gangnam severance hospital,
	Yonsei University
2006-2012	Assistant professor, Department of Neurosurgery, Spine center,
	Hallym University Medical Center
2012-2013	Assitant professor, Department of Neurosurgery, Spine center,
	CHA medical Center, CHA University.
2013-2019	Spine Center, Neurosurgery, The Leon Wiltse Memorial Hospital
2019-2020	Spine Center, Neurosurgery, Gangnam Nanoori Hospital. Seoul
2020~	Endoscopic spine surgery center, Spine Center, Seoul Bumin Hospital

FIELDS OF INTEREST:

Minimally invasive spine surgery Biportal endoscopic surgery Minimally invasive fusion surgery Endoscopic fusion surgery

PUBLICATIONS [First author or Corresponding author only]

- Neurospine 2022
 Comparative Analysis With Modified Inclined Technique for Posterior Endoscopic
 Cervical Foraminotomy in Treating Cervical Osseous Foraminal Stenosis: Radiological and
 Midterm Clinical Outcomes
 Kim JY, <u>Heo DH</u>, Lee DC, Kim TH, Park CK.
- World Neurosurgery 2022
 Surgical Removal of Cervical Extradural Cysts Using the Biportal Endoscopic Approach. Kim JY, <u>Heo DH</u>, Lee DC, Park CK. Chung H.
- Operative Neurosurgery, 2022
 Clinical Experiences of 3-Dimensional Biportal Endoscopic Spine Surgery for Lumbar Degenerative Disease
 <u>Heo DH</u>, JY Kim, JY Park, JS Kim, HS Kim, J Roh, CK Park, H Chung
- International Journal of Spine Surgery 15 (suppl 3), 2021 Biportal Endoscopic Technique for Transforaminal Lumbar Interbody Fusion: Review of Current Research MS Kang, <u>DH Heo</u>, HB Kim, HT Chung
- Acta neurochirurgica 2021
 Contralateral sublaminar approach for decompression of the combined lateral recess, foraminal, and extraforaminal lesions using biportal endoscopy: a technical report JY Kim, <u>DH Heo</u>
- Applied Sciences 11 (4), 2021
 Advances in tissue engineering for disc repair
 CK Lee, <u>DH Heo,</u> H Chung, EJ Roh, A Darai, JW Kyung, H Choi, SY Kwon
- Acta Neurochirurgica 2021
 Biportal endoscopic unilateral laminotomy with bilateral decompression for the treatment
 of cervical spondylotic myelopathy
 J Kim, <u>DH Heo,</u> DC Lee, HT Chung

- Acta Neurochir (Wien). 2021 Apr Modified far lateral endoscopic transforaminal lumbar interbody fusion using a biportal endoscopic approach: technical report and preliminary results. <u>Heo DH</u>, Eum JH, Jo JY, Chung H.
- Global Spine J. 2020 Nov Repair of Incidental Durotomy Using Sutureless Nonpenetrating Clips via Biportal Endoscopic Surgery.
 <u>Heo DH</u>, Ha JS, Lee DC, Kim HS, Chung HJ
- World Neurosurg. 2021 Jan Clinical Results and Complications of Endoscopic Lumbar Interbody Fusion for Lumbar Degenerative Disease: A Meta-Analysis. <u>Heo DH</u>, Lee DC, Kim HS, Park CK, Chung H.
- Neurospine. 2020 Jul Technique of Biportal Endoscopic Transforaminal Lumbar Interbody Fusion. <u>Heo DH</u>, Hong YH, Lee DC, Chung HJ, Park CK.
- 12. Brain Sci. 2020 Jun

Fully Endoscopic Transforaminal Lumbar Discectomy for Upward Migration of Upper Lumbar Disc Herniation: Clinical and Radiological Outcomes and Technical Considerations. <u>**Heo DH**</u>, Lee DK, Lee DC, Kim HS, Park CK.

World Neurosurgery 2020
 Endoscopic unilateral laminotomy with bilateral discectomy using biportal endoscopic

approach: technical report and preliminary clinical results Heo DH, Lee N, Park CW, Kim HS, Chung HJ.

14. J clin Neurosci. 2019 Jun

Slippage reduction of lumbar spondylolisthesis using percutaneous pedicle screw with reduction fixation system after interbody fusion: A comparison with traditional open fusion and pedicle screw fixation.

Heo DH, Jang JW, Lee JK, Park CK.

- Neurospine. 2019. Apr. Comparative Finite Element Analysis of Lumbar Cortical Screws and Pedicle Screws in Transforaminal and Posterior Lumbar Interbody Fusion. Sin DA, <u>Heo DH.</u>
- 16. Neurosurg Focus. 2019 May

Comparative analysis of three types of minimally invasive decompressive surgery for lumbar central stenosis: biportal endoscopy, uniportal endoscopy, and microsurgery. **Heo DH**, Lee DC, Park CK.

17. Neurospine. 2019 Mar

Endoscopic Treatment of Extraforaminal Entrapment of L5 Nerve Root (Far Out Syndrome) by Unilateral Biportal Endoscopic Approach: Technical Report and Preliminary Clinical Results. **Heo DH**, Sharma S, Park CK.

- Neurosurg Focus. 2019 Apr Clinical results of percutaneous biportal endoscopic lumbar interbody fusion with application of enhanced recovery after surgery.
 Heo DH, Park CK.
- World Neurosurg. 2018 Nov Contra-lateral sublaminar endoscopic approach for removal of lumbar juxtafacet cysts using percutaneous biportal endoscopic surgery: Technical report and preliminary results. <u>Heo DH</u>, Kim JS, Park CW, Quillo-Olvera J, Park CK.
- 20. J Neurol Surg A Cent Eur Neurosurg. 2019 Jan Concomitant Occlusive Vascular Lesions of Legs in Patients with Degenerative Lumbar Diseases: Do These Lesions Influence Treatment? Lee DC, <u>Heo DH</u>, Cho KS.
- World Neurosurg. 2018 Dec Can Percutaneous Biportal Endoscopic Surgery Achieve Enough Canal Decompression for Degenerative Lumbar Stenosis? Prospective Case-Control Study. <u>Heo DH</u>, Quillo-Olvera J, Park CK.
- 22. Asian Spine J. 2018 Jun Usefulness of Oblique Lumbar Magnetic Resonance Imaging for Nerve Root Anomalies and Extraforaminal Entrapment Lesions.
 <u>Heo DH</u>, Kim SW, Chang HH, Park CK.
- 23. Neurosurg Focus. 2017 Aug Fully endoscopic lumbar interbody fusion using a percutaneous unilateral biportal endoscopic technique: technical note and preliminary clinical results.
 <u>Heo DH</u>, Son SK, Eum JH, Park CK.
- 24. Neurosurg Focus. 2017 Aug Clinical and radiological outcomes of spinal endoscopic discectomy-assisted oblique lumbar interbody fusion: preliminary result <u>Heo DH</u>, Kim JS.

- Pain Physician. 2017 Feb Percutaneous Sacroplasty for Non-neoplastic Osteoporotic Sacral Insufficiency Fractures. <u>Heo DH</u>, Park CK.
- 26. Neurosurg Focus. 2017 Feb Bone loss of vertebral bodies at the operative segment after cervical arthroplasty: a potential complication?
 <u>Heo DH</u>, Lee DC, Oh JY, Park CK.
- 27. World Neurosurg. 2016 Dec Minimally Invasive Oblique Lumbar Interbody Fusion with Spinal Endoscope Assistance: Technical Note.
 <u>Heo DH</u>, Choi WS, Park CK, Kim JS.
- 28. Biomed Res Int. 2016
 Percutaneous Pedicle Screw Fixation with Polymethylmethacrylate Augmentation for the Treatment of Thoracolumbar Intravertebral Pseudoarthrosis Associated with Kummell's Osteonecrosis.
 Kim HS, Heo DH.
- Journal of Neurosurgery, Spine 2016 E-pub Percutaneous biportal endoscopic decompression for lumbar spinal stenosis: a technical note and preliminary clinical results. Eum JH, <u>Heo DH</u>, Son SK, Park CK
- European spine journal 2015 May Whole cerebral axis infection after lumbar epidural injection. A case report. Noh SH, <u>Heo DH</u>
- Journal of Spinal disorder and technique. 2013. Nov Do Postoperative Biomechanical Changes Induce Heterotopic Ossification After Cervical Arthroplasty? A 5-year Follow-Up Study. Kim KS, <u>Heo DH.</u>
- 32. J Neurooncol. 2012 May
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 <u>Heo DH</u>, Kim SH, Yang KM, Cho YJ, Kim KN, Yoon DH, Kang TC.
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 The changes of ERG channel expression after administration of antiepileptic drugs in the hippocampus of epilepsy gerbil model.
 <u>Heo DH</u>, Kang TC

34. Joint Bone Spine 2011

Lumbar epidural gas-containing pseudocysts as a cause of severe radicular pain. Kuh SU, <u>**Heo DH**</u>, Kim KS, Cho YJ.

35. Joint Bone Spine 2011 Jan

Spontaneous migration of a polymethylmethacrylate mass after vertebroplasty in osteoporotic lumbar compression fracture with avascular osteonecrosis: a case report. Cho SM, <u>**Heo DH**</u>, Cho YJ.

36. Spine 2011 Oct

Therapeutic Efficacy of Vertebroplasty in Osteoporotic Vertebral Compression Fractures with Avascular Osteonecrosis: A Minimum 2 Year Follow Up Study. <u>**Heo DH**</u>, Choi JH, Kim MK, Choi HC, Jung JH, Chin DK, Cho YJ.

- 37. Journal of Spinal Disorder and Technique 2011 Oct Adjacent Segment Degeneration After Lumbar Dynamic Stabilization Using Pedicle Screws and a Nitinol Spring Rod System With 2-year Minimum Follow-up. <u>Heo DH</u>, Cho YJ, Cho SM, Choi HC, Kang SH.
- Am Journal of Neuroradiology 2010 Oct
 3D reconstructions of spinal segmental arteries using CT angiography: applications in minimally invasive spinal procedures.
 <u>Heo DH</u>, Cho YJ, Sheen SH, Hong MS, Cho SM, Park SH.
- Journal of Neurology Magnetic resonance neurography findings in herpetic brachial plexopathy. <u>Heo DH</u>, Jun AY, Cho YJ.
- 40. Osteoporosis International. 2009 Mar 20. Morphological changes of injected calcium phosphate cement in osteoporotic compressed vertebral bodies.
 <u>Heo DH</u>, Cho YJ, Sheen SH, Kuh SU, Cho SM, Oh SM.
- Surgical Neurology. 2009 Oct 12. Heterotopic ossifications after vertebroplasty using calcium phosphate in osteoporotic vertebral compression fractures Report of 2 cases. <u>Heo DH</u>, Cho SM, Cho YJ, Cho JH, Sheen SH.
- 42. Spine. 2009 Oct 15;34(22):2419-23.
 Simple oblique lumbar magnetic resonance imaging technique and its diagnostic value for extraforaminal disc herniation.
 <u>Heo DH</u>, Lee MS, Sheen SH, Cho SM, Cho YJ, Oh SM.

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 Recollapse of previous vertebral compression fracture after percutaneous vertebroplasty.
 <u>Heo DH</u>, Chin DK, Yoon YS, Kuh SU.
- 44. Journal of Neurosurgery, Spine. 2007 Jun;6(6):559-62.
 Progressive, repeated lumbar compression fracture at the same level after vertebral kyphoplasty with calcium phosphate cement. Case report.
 <u>Heo DH</u>, Kuh SU.
- 45. J Korean Neurosurg Soc. 2008 Nov Posterior cervical fixation with nitinol shape memory loop in the anterior-posterior combined approach for the patients with three column injury of the cervical spine : preliminary report. Yu DK, <u>Heo DH</u>, Cho SM, Choi JH, Sheen SH, Cho YJ.
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 Heo DH, Cho YJ

Publication TEXT

- Advanced techniques of endoscopic lumbar spine surgery 2020
 Biportal Endoscopic Approach for Lumbar Central Stenosis

 Biportal Endoscopic Transforaminal Lumbar Interbody Fusion
 Contralateral Sublaminar Approach for Lumbar Foraminal Stenosis Using Biportal
 Endoscopic Surgery
 Biportal Endoscopic Approach (Biportal Endoscopic Lumbar Discectomy)
 Biportal Endoscopic Paraspinal Approach for Foraminal and Extraforaminal Disc
 Herniations
 Paradigm Shifting of Endoscopic Spine Surgery
- Endoscopic spine procedures on the spine, 1st edition, 2019 Chapter 19: Percutaneous biportal endoscopic discectomy for lumbar disc herniation Chapter 20: Percutaneous biportal endoscopic decompression for lumbar central and foraminal stenosis.
- Endoscopic spine surgery 2nd edition, 2018 Chapter 11: Percutaneous Unilateral Biportal Endoscopic Diskectomy and Decompression for Lumbar Degenerative Disease
- 4. 척추학 2 판, 대한 척추신경외과학회, 2018 Intra-discal therapy

 Surgical atlas of spine. 2010 Chapter 31. Fixation of the Thoracic Thoracolumbar Junction - Anterior fixation