

CURRICULUM VITAE

Gun Choi, M.D., Ph.D.

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TITLES

- Chairman of Pohang Wooridul Hospital
- Honorary Chairman of Seoul Gimpo Airport Wooridul Hospital
- President of World Congress of Minimally Invasive Spine Surgery and Techniques (WCMISST)
- Executive director of Asia Congress of Minimally Invasive Spine Surgery and Techniques (ACMISST)
- President of Spinal Therapeutic Technology Related Link(STTeL)
- Vice president of Korea Medical Service Society
- Member of World Federation of Neurosurgical Societies(WFNS) Spine Committee

EDUCATION:

- **Ph.D. :Neurosurgery**
Hanyang University School of Medicine, Seoul, Korea 2/2003
- **M.D :Neurosurgery**
Hanyang University School of Medicine, Seoul, Korea 3/2003
- **B.S: Medicine**
Hanyang University School of Medicine, Seoul, Korea 2/1988

POSTGRADUATE TRAINING:

- **Internship**
Hanyang University Hospital, Seoul, Korea 3/1993-2/1994

HONORS AND AWARDS:

- **The Best Paper Award, IITS** 2077
- **Hijikata Award, WCMISST** 2008
- **Foremost Scientists of the World** 2008
International Biographical Centre Cambridge, England

ACADEMIC APPOINTMENTS:

- **Attending Professor**
Hanyang University Medical Center 5/2010- present
- **Instructor of International Fellowship** 12/2010- present
Seoul Gimpo Airport Wooridul Spine Hospital

HOSPITAL APPOINTMENTS:

- **Surgeon, Department of Neurosurgery** 10/1999-12/2010
Chungdam Wooridul Spine Hospital, Seoul, Korea
- **President** 12/2010-present
Soul Gimpo Airport Wooridul Spine Hospital, Seoul, Korea

TEACHING EXPERIENCE

- **Instructor at the 1st International Spine Cord Basic Research and Clinical Innovation Seminar & the 2nd Annual Meeting of the Orthopaedic in Tianjin**
Tianjin Medical University General Hospital 9/2014
- **Director at 1st Didactic Course of Endoscopic Spine Procedures (including Cadaver Workshop)** 1/2014
Seoul Gimpo Airport Wooridul Spine Hospital, Seoul, Korea
- **Director at 2nd didactic Course of Endoscopic Spine Procedures** 7/2014
Seoul Gimpo Airport Wooridul Spine Hospital, Seoul, Korea
- **Workshop and Live Surgeries about Percutaneous Endoscopic Discectomy** 2007
Kuala Lumpur, Malaysia
- **Workshop and Live Surgery about Percutaneous Endoscopic Discectomy** 12/2005
Mumbai, India
- **Cadaverworkshop KIMISS** 5/2005
- **Hands-on Workshop on Percutaneous Endoscopic Lumbar Discectomy** 4/2005
Seoul, Korea
- **Workshop and Live Surgery at Chennai Indian Orthopaedic Association** 12/2003
India

LICENSES AND CERTIFICATIONS

Licenses:

Korea(No. 842)

Certifications:

- **Minimally Invasive Spinal Surgery** 2002

Surgical Experience in Endoscopic Spinal Surgery

- **Spinal Surgery:** more than 8,482 1999-present
- **PELD & PECD:** more than 2,500 1999-present

Invited Lectures

1. Cervical Endoscopic surgery: Anterior and Posterior approaches The 9th International Congress of Chinese Orthopedic Association 11/2014
2. Endoscopic Thoracic Discectomy: Technique and case example The 9th International Congress of Chinese Orthopedic Association 11/2014
3. Posterior cervical procedure 3rd Asian Congress of Minimally Invasive Spine Surgery & Techniques 11/2014
4. Surgical anatomy-pitfall & tips 3rd Asian Congress of Minimally Invasive Spine Surgery & Techniques 11/2014
5. Migrated disc herniation 3rd Asian Congress of Minimally Invasive Spine Surgery & Techniques 11/2014
6. Update of Percutaneous Endoscopic for Lumbar Degenerative Disease, the 1st International Spine Cord Basic Research and Clinical Innovation Seminar & the 2nd Annual Meeting of the Orthopaedic, Tianjin Medical University General Hospital, China 9/2014
7. Surgical Strategy of PELD for migrated disc herniation, the 1st International Spine Cord Basic Research and Clinical Innovation Seminar & the 2nd Annual Meeting of the Orthopaedic, Tianjin Medical University General Hospital, China
8. Cervical Endoscopic Decompression, ISASS MIS Spine surgery for Ambulatory Surgery Facilities Workshop, The International Society for the Advancement of Spine Surgery (ISASS) 9/2014
9. Thoracic Endoscopic discectomy, ISASS 9/2014
10. Posterolateral Foraminal Access to the Lumbar Spine: Targeted, ISASS 9/2014
11. PECD, Shanghai minimally invasive spinal surgery frontier forum, Shanghai, China 8/2014
12. Update for PECD, Shanghai minimally invasive spinal surgery frontier forum, Shanghai, China 8/2014
13. Pitfall and Tips of Percutaneous Endoscopic Lumbar Discectomy and Percutaneous Endoscopic Cervical Discectomy, The 4th World Congress Minimally Invasive Spine Surgery Techniques, Paris, France 6/2014
14. Transcorporeal Tunnel Approach for Unilateral Cervical Radiculopathy: a 2-years follow-up review and result, The 4th World Congress Minimally Invasive Spine Surgery Technique (WCMSST) Paris, France 6/2014
15. Strategy for migrated Disc Herniation, The 4th WCMSST, Paris, France 6/2014

16. Percutaneous Endoscopic Cervical Discectomy: Surgical Pitfall and Tips, The 1st Vietnam-Korea MISS Symposium 2/2014
17. Advanced Minimal Invasive Spinal Surgery, International Society for Minimal Intervention in Spinal Surgery (ISMIS) 1/2014
18. Transforaminal Percutaneous Endoscopic Lumbar Discectomy, Thailand Minimally Invasive Spine Surgery Symposium, Thailand 12/2013
19. Percutaneous Cervical Discectomy: Anterior Approach, Thailand Minimally Invasive Spine Surgery Symposium, Thailand 12/2013
20. Transcorporeal Tunnel Approach for Unilateral Cervical Radiculopathy: A 2-year Follow-up Review and Results, Society for Minimally Invasive Spine Surgery (SMISS), Las Vegas, USA 12/2013
21. Highly Migrated Disc Herniation, 26th International Intradiscal Therapy Society (IITS) Seoul, Korea 9/2013
22. Calcified Disc Herniation, IITS, Seoul, Korea 9/2013
23. State of the Arts and Pitfall of Percutaneous Endoscopic Lumbar Discectomy, ISMISS, Japan 6/2013
24. Clinical Results for X-MR Assisted Percutaneous Transforaminal Endoscopic Lumbar Discectomy, ISMISS, Japan 6/2013
25. Clinical Outcome of Soft Stabilization Using a Locker with a Tension Band: A Minimum 5 year follow-up, 6th ISMISS Congress, Turkey 4/2013
26. Removal of Thoracic OPLL and OLF via Transthoracic Extrapleural Approach, 6th ISMISS Congress, Turkey 4/2013
27. Posterior Neck Pain as a Indicator of Increased Intracranial Pressure (iicp) Sign During Percutaneous Endoscopic Lumbar Discectomy (PELD), 2nd ACMISST combined with the 6th MISS Summit Forum, Japan 3/2013
28. Surgical Tips for PECD, 3rd International Symposium and Cadaver Workshop for Transforaminal Endoscopic Spine Surgery, Korea 1/2013
29. Percutaneous Endoscopic Spinal Surgery-Avoidance of Complication, 1st China International Seminar on Cervical Spine Endoscopic Technique 12/2012
30. Risk Factor for a Second Surgery in Adjacent Level after One Level ACDF, Asia Pacific Cervical Spine Society 11/2012
31. The advances in Percutaneous Endoscopic Lumbar Discectomy, The 3rd World Congress Minimally Invasive Spine Surgery Techniques 8/2014
32. Anterior MISS for Cervical Radiculopathy, The 10th Annual Meeting of The Indonesian Spine Society (ISS), 3rd International Society of Minimal Intervention in Spinal Surgery (ISMIS), Indonesia 7/2014
33. Updated Percutaneous Endoscopic Cervical Discectomy, The 5th MISS SUMMIT FORUM 3/2012
34. Evolution of Percutaneous Endoscopic Discectomy, The 1st Saudi International Spine Conference, Saudi Arabia 1/2012

35. Transforaminal Endoscopic Discectomy Surgery in All Its Flavor, The Organizing Committee of MISS Spine, India 12/2011
36. Complications of PELD & PECD, The Korean Minimally Invasive Spinal Surgery Society, Seoul, Korea 12/2011
37. Calcified Disc Removal, (Internal Approach Session), Asian Congress of Minimally Invasive Spine Surgery & Techniques, 5/2011
38. Endoscopic Discectomy; Past, Present, and Future, The Korean Spine Pain Society 4/2011
39. Percutaneous Endoscopic Lumbar Discectomy, Symposium of Spinal Nerves Research Center in Yensei Univ. 2/2011
40. PELD in Recurrent Disc, Korean Minimally Invasive Spinal Surgery Society 11/2010
41. Cervical Endoscopic Surgery: Indications, Technical Pearls, Outcomes, SMISS 11/2010
42. Minimally Invasive Spine Surgery, Busan Univ. Anesthesiology Symposium 4/2008
43. Percutaneous Foraminoplasty Transforaminal Approach for Migrated Lumbar Disc Herniation by Using Rigid Working Channel Endoscope, JSMIOS 12/2006
44. Shoulder Approach of Interlaminar Discectomy Using Rigid Working Channel Endoscope: Surgical Techniques and Clinical Outcome, JSMIOS 12/2006
45. Current Indications for Percutaneous Endoscopic Lumbar Discectomy, Japan Society for Study of Surgical Techniques for Spine and Spinal Nerves 9/2006
46. Percutaneous Endoscopic Interlaminar Discectomy for L5-S1 Disc Herniation-Target Oriented Approach, Indian Orthopaedic Association 50th Annual Conference 12/2005
47. The Future of the Minimally Invasive Spinal Surgery Percutaneous Endoscopic Lumbar Discectomy(PELD) Indian Orthopaedic Association 48th Annual Conference 12/2003

Presentation at Scientific Meetings

International Presentation

1. Transcorporeal Tunnel Approach for Unilateral Cervical Radiculopathy: A 2 year Follow-up Review and Results, SMISS, Las Vegas, USA 10/2009
2. Postoperative Hematoma Following Transforaminal Percutaneous Endoscopic Lumbar Discectomy- the incidence, Causative Factors and the Effect of Drains, PASMIS 8/2008
3. Technique for Migrated Disc Herniation, WCMISST, Honolulu, Hawaii 6/2008
4. PELD for Migrated Disc Herniation Early Clinical Result of X-MR Guided PELD Interlaminar PELD for L5S1 Lumbar Disc Herniation, Minimally Invasive Orthopaedic Surgery, Japan 12/2006
5. Modified Transcorporeal Anterior Cervical Microforaminotomy for Cervical Radiculopathy-20 Consecutive Cases with a Minimum 1-Year-Followup, PASMIS 8/2006
6. PELD, Indian Orthopaedic Association 50th Annual Conference 12/2005
7. Aimed Fragmentectomy through Interlaminar Space Using Rigid Working Channel Endoscope at

- L5-S1 Disc Herniation, The 5th Biennial Japan-Korea Conference on Spinal Surgery, Japan 6/2005
8. Prognostic Factors for Cervical Ossification of Posterior Longitudinal Ligament Treated by Corpectomy and Fusion Percutaneous Transforaminal Endoscopy for Lumbar Discitis: Prognostic Factors Affecting Clinical Outcome in 26 Consecutive Cases, AANS/CNS 3/2005
 9. Minimum Two-Year Follow-up of Surgical Treatment for Degenerative Flat Back by ALIF Followed by Posterior Instrumentation, Congress of Neurosurgical Surgeons (CNS) 10/2004
 10. State of the Art and Future, 48th Annual Conference of Indian Orthopedic Association Chennai Trade Centre, India 12/2003
 11. The Effect of Lumbar Extension Exercise Program for Patients Who Have Undergone Operations for Prolapsed Lumbar Intervertebral Disc.-Surgical Outcome and Prognostic Factors of Thoracic Disc Herniation, The 53rd Congress of Neurological Surgeons, San Diego, USA 10/2003
 12. ALIF Using BAK Cage for Failed Back Surgery Syndrome Surgical Treatment for Migrated Lumbar Disc Herniation with Percutaneous Transforaminal Epiduroscopic Discectomy, SICOT/SIROT, Egypt 10/2003
 13. Surgical Treatment for Migrated Lumbar Disc Herniation with Percutaneous Transforaminal Epiduroscopic Discectomy, World Spine II, Chicago, USA 8/2003
 14. Anterior Lumbar Interbody Fusion Using BAK Cages for Treatment of Failed Back Surgery Syndrome, AANS 3/2003
 15. Unilateral Extraforaminal Lumbar Fusion for Extraforaminal Stenosis with Instability, 7th International Argos Symposium, Paris, France 1/2003
 16. Surgical treatment for Migrated Lumbar Disc Herniation with Percutaneous Transforaminal Epiduroscopic Discectomy Posterior One Cage Insertion and Contralateral Translaminar Facet Screw Fixation Degenerative Lumbar Disc Disease Percutaneous Endoscopic Lumbar Discectomy for Foraminal and Extraforaminal Herniations, 52nd Annual Meeting Congress of Neurological Surgeons, Philadelphia, USA 9/2002
 17. Unilateral Extraforaminal Lumbar Interbody Fusion for Extraforaminal Stenosis with Instability, SICOT/SIROT, 2002 XXII World Congress, San Diego, USA 8/2002
 18. Comparison between Selective Arthroscopic Laser Discectomy with Thermal Modulation and Intradiscal Electrotherapy for Chronic Low Back Pain, IMLAS& SICOT/SIROT 2002 XXII World Congress, San Diego, USA 8/2002
 19. Comparison of Percutaneous Cervical Discectomy to Open Anterior Discectomy for Soft Cervical Disc Herniation, The 70th Annual Meeting AANS, Chicago, USA 6/2002
 20. Percutaneous Endoscopic Discectomy for Foraminal and Extraforaminal Disc Herniation, World Congress of Minimally Invasive Spinal Medicine & Surgery(AAMISMS) 12/2001
 21. Unilateral Extraforaminal Lumbar Interbody Fusion for Extraforaminal Stenosis with Instability, 51st Annual Meeting Congress of Neurosurgical Surgeons, San Diego, USA 9/2001
 22. Comparison between Arthroscopic Discectomy with Thermal Modulation and Intradiscal Electrotherapy for Chronic Low Back Pain, The 8th International Congress of the International Musculoskeletal Laser Society, Cartagena, Colombia 5/2001

Domestic Presentations

23. Percutaneous Endoscopic Lumbar Discectomy, Korean Neurosurgery Society Annual Meeting
5/2010
24. State of Arts and Pitfall of Percutaneous Endoscopic Lumbar Discectomy ,KOSAS 4/2010
25. Prognostic Factors of Percutaneous Endoscopic Lumbar Discectomy, KSAS 4/2005
26. Shoulder Approach of Interlaminar Discectomy Using Rigid Working Channel Endoscope;
Surgical Technique and Preliminary Clinical Outcome Percutaneous Endoscopic Laser-assisted
Treatment for Lumbar, Cervical and Thoracic Disc Herniations-Clinical Results in Recent 6 Years,
KNS 4/2004
27. Minium Two-Year Follow-up of Surgical Treatment for Degenerative Flat Back by ALIF Followed
By Posterior Instrumentation, KNS 10/2004
28. Percutaneous Intertransverse Endoscopic Discectomy for Extraforaminal Disc Herniation-
Technical Report and Clinical Result, KNS 10/2004

Professional Memberships

- President of World Congress of Minimally Invasive Spine Surgery and Techniques
- President of International Intradiscal Therapy Society
- Executive Director of Korean Minimally Invasive Spinal Surgery
- Executive Director of Asia Congress of Minimally Invasive Spinal Surgery
- Chief Director of Korea society of Interventional Muscle and Soft Tissue Stimulation Therapy
- Vice president of Korea Medical Service Society
- Directors of Board of Korean Neurological Spinal Surgery
- Member of World Federation of Neurosurgical Societies(WFNS) Spine Committee
- Member of Korean Neurosurgical Society
- Member of International Musculoskeletal Laser Society
- Member of International Intradiscal Therapy Society
- Member of the International Society of Minimally Invasive Spinal Surgery
- Member of American Board of Minimally Invasive Spinal surgery and Medical Science

MANUSCRIPTS as a FIRST AUTHOR

1. Working Channel Endoscope in Lumbar Spine Surgery, Journal of Neurosurgical Sciences
Gun Choi, Ketan Deshpande, 2014 June; 58(2):77-85
2. Clinical Results of XMR-assisted Percutaneous Transforaminal Endoscopic Lumbar Discectomy,
Gun Choi, Hitesh N Modi, Nicolas Prada, Tae-Joon Ahn, Sung Myung, Mi Gang, Sang-
Ho Lee, Journal of Orthopaedic Surgery and Research 2013, 8:14 (25 May 2013)
3. Risk of Developing Seizure After Percutaneous Endoscopic Lumbar Discectomy, Choi, Gun; Kang,
Ho-Yeong; Modi, Hitesh N.; More, Journal of Spinal Disorders & Techniques. 24(2):83-92, April 2011.

4. Percutaneous Endoscopic Lumbar Herniectomy for High-grade Down-migrated L4-L5 Disc through an L5-S1 Interlaminar Approach: a technical note, *Minimally Invasive Neurosurgery* 2010, June; 53(3):147-52
5. Transcorporeal Tunnel Approach for Unilateral Cervical Radiculopathy: 2-year follow-up Review and results, *Minimally Invasive Neurosurgery*, 2010 June:53(3):127-31
- 6 .Percutaneous Endoscopic Lumbar Discectomy(PELD)-Interlaminar Approach, *Argospine*2010 Sep;22(3):104-108
7. Percutaneous Endoscopic Cervical Discectomy:16years of experience and literature review *COLUMNA/COLUMNA*,2009;8(3):344-348
8. Percutaneous Endoscopic Lumbar Discectomy by Transiliac Approach: *Spine*, 2009 May 20; 34(12):E443-6
9. Discectomy Endoscopic Percutaneous Lumbar, *COLUMA/COLUMNA*,2008 Jul;7(2):177-182
10. Percutaneous Endoscopic Approach for Highly Migrated Intracanal Disc Herniations by Foraminoplastic Technique Using Rigid Working Channel Endoscop, *Spine*, 2008 jul; 33(15):E508-515
11. Percutaneous Endoscopic Discectomy for Extraforaminal Lumbar Disc Herniations, *Spine*, 2007 Jan; 32 No2:93-99
12. Modified transcorporeal anterior cervical microforaminotomy for cervical radiculopathy: a technical note and early results, *European Spine Journal* 2007 Jan, Sep2007, Volume 16, pp 1387-1393 Gun Choi, Sang-Ho Lee,Arun Bhanot,Yu Sik Chae, Byungjoo Jung, Seungcheol Lee
13. Percutaneous Endoscopic Interlaminar Discectomy for Intracanalicular Disc Herniations at L5-S1 Working Channel Endoscope, *Neurosurgery* 2006;58(1 Suppl):59-68
14. The Effect of Early Isolated Lumbar Extension Exercise Program for Patients with Herniated Disc Undergoing Lumbar Discectomy, *Neurosurgery* 2005 Oct;57(4):764-72

TEXTBOOK CHAPTERS

1. *Neurosurgery Tricks of the Trade*, Thieme 2013, Ch43.Percutaneous Endoscopic Thoracic Discectomy; Ch44.Percutaneous Endoscopic Lumbar Discectomy
2. *Lumbo-Sacral and Pelvic Procedures*, Quality Medical Publishing, Inc.St.2013, Ch. Lumbar Transarticular Facet Screw Fixation
3. *Procedimentos Endoscópicos Da Coluna Vertebral*, Di Livros 2013
4. *The Text book of Spine*, Koonja Publishing Inc. 2013, Ch26. Percutaneous Endoscopic Laser Cervical Discectomy
5. *Surgical Anatomy and Techniques, to the Spine*, ELSEVIER 2013, Ch42. Percutaneous Endoscopic Discectomy
6. *Endoscopic Spinal Surgery*, JP medical publisher 2013, Ch17. Percutaneous Endoscopic Lumbar Discectomy: interlaminar approach

7. Minimally Invasive Spine Surgery, Koonja publishing Inc. 2012 Ch10.Percutaneous Endoscopic Cervical Discectomy, Ch18.Percutaneous Endoscopic Lumbar Discectomy
8. The Text book of Spine, Koonja publishing Inc.2012 Jun Ch18. Percutaneous Endoscopic Lumbar Discectomy
9. Endoscopic Spine Proucedures, Thime 2011, Daniel.H.Kim, Gun Choi, Sang-Ho Lee
10. Percutaneous Endoscopic Lumbar Discectomy for Extraforaminal Disc Herniation, JAYPEE Brothers Medical Publishers 2009,pp.23-28
11. Percutaneous Endoscopic Lumbar Discectomy, Koonja Publishing Inc. pp1173-1185