

Vit Kotheeranurak, MD

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Personal Information

Birth: Bangkok, Thailand

Languages: Thai  English 

Expertise and Area of interest

Endoscopic spine surgery, Minimally invasive spine surgery

Education

Research Fellowship Minimally invasive and endoscopic spine surgery, 2018

The Catholic University of Korea, Seoul St. Mary's Hospital, Seoul, South Korea

Biportal endoscopic spine surgery, 2018

The Leon-Wiltse Memorial Hospital, Suwon, South Korea

Endoscopic spine surgery, 2018

Desert Institute Spine Center (DISC), Phoenix, Arizona, USA

Spinal deformity and minimally invasive spine surgery, 2017

The Cedars-Sinai medical center, Los Angeles, California, USA

Fellowship

Spine surgery, 2016-2017

Spine unit, Orthopaedic department, King Chulalongkorn Memorial Hospital

Residency

Certified Thai Board of Orthopedic Surgery, 2013-2016 (Class President)

Queen Savang Vadhana Memorial Hospital, Sriracha, Chonburi, Thailand

Internship

Queen Savang Vadhana Memorial Hospital, 2011-2012

Sriracha, Chonburi, Thailand

Medical school

Doctor of medicine, 2007-2011

Chulalongkorn University, Bangkok, Thailand

Current Work Position

- Clinical instructor at King Chulalongkorn Memorial Hospital (Thai Red Cross)
- Assistant Vice President (Scientific program) of the Spine Society of Thailand [SST]
- Diversity Task Force, North American Spine Society (NASS)
- Editor of *Neurospine* journal
- Instructor in Endoscopic spine surgery curriculum (AO spine)

Research and published articles

- Transforaminal Endoscopic Decompression of the Lumbar Spine for Stable Degenerative Spondylolisthesis as the Least Invasive Surgical Treatment Using the YESS Surgery Technique, *J Spine*. 2018
- Transforaminal Endoscopic Decompression of the Lumbar Spine for Stable Isthmic Spondylolisthesis as the Least Invasive Surgical Treatment Using the YESS Surgery Technique, *Int J Spine Surg*. 2018
- Clinical and Radiologic Outcomes of Direct Versus Indirect Decompression with Lumbar Interbody Fusion: A Matched-Pair Comparison Analysis, *World Neurosurg*. 2018
- Endoscope-assisted anterior lumbar interbody fusion with CT-guided image navigated unilateral cortical bone trajectory screw fixation in managing adjacent segment disease in L5/S1: a technical note, *World Neurosurg*. 2019
- Comparative analysis of the intervertebral disc signal and annulus changes between immediate and 1-year postoperative MRI after transforaminal endoscopic discectomy and annuloplasty, *Neuroradiology*. 2019
- A systematic review of unilateral bi-portal endoscopic spinal surgery: preliminary clinical results and complication, *World Neurosurg*. 2019
- Does the Neck Pain, Function, or Range of Motion Differ After Anterior Cervical Fusion, Cervical Disc Replacement, and Posterior Cervical Foraminotomy?, *World Neurosurg*. 2019
- A longitudinal investigation of the endplate cystic lesion effect on oblique lumbar interbody fusion, *Clin Neurol Neurosurg*. 2019
- Worldwide research productivity in the field of full-endoscopic spine surgery: a bibliometric study, *Eur Spine J*. 2020
- AOSpine Consensus Paper on Nomenclature for Working-Channel Endoscopic Spinal Procedures, *Global spine j*. 2020
- Neutral hip position for the oblique lumbar interbody fusion (OLIF) approach increases the retroperitoneal oblique corridor, *BMC Musculoskelet Disord*. 2020
- Full Endoscopic Technique for High-Grade Up-Migrated Lumbar Disk Herniation via a Translaminar Keyhole Approach: Preliminary Series and Technical Note, *J Neurol Surg A Cent Eur Neurosurg*. 2020
- No Difference in Pain After Spine Surgery with Local Wound Filtration of Morphine and Ketorolac: A Randomized Controlled Trial, *Clin Orthop Relat Res*. 2020
- Trajectory of Lumbar Translaminar Facet Screw under Navigation: A Cadaveric Study, *Global spine j*. 2020
- Minimally Invasive Percutaneous Modified Iliac Screw Placement Using Intraoperative Navigation: A Technical Note, *World Neurosurg*. 2021

Research and published articles (Cont.)

- Full-endoscopic decompression for thoracic myelopathy caused by ossification of the ligamentum flavum: patient series, *J Neurosurg Case Lessons*. 2021
- Anterior transcorporeal full-endoscopic drainage of a long-span ventral cervical epidural abscess: A novel surgical technique, *N Am Spine Soc J*. 2021
- Psoas Major Muscle Volume Does Not Affect the Postoperative Thigh Symptoms in XLIF Surgery, *Brain Sci*. 2021
- Subsidence of Interbody Cage Following Oblique Lateral Interbody Fusion: An Analysis and Potential Risk Factors. *Global Spine J*. 2021.
- Do Obliquity and Position of the Oblique Lumbar Interbody Fusion Cage Influence the Degree of Indirect Decompression of Foraminal Stenosis? *J Korean Neurosurg Soc*. 2022.
- Comparison of Perioperative and Postoperative Outcomes of Minimally Invasive and Open TLIF in Obese Patients: A Systematic Review and Meta-Analysis. *J Pain Res*. 2022.
- Comparison of Unremoved Intervertebral Disc Location Between 2 Lateral Lumbar Interbody Fusion (LLIF) Techniques. *World Neurosurg*. 2022.
- Anterior Transcorporeal Approach for Cervical Metastatic Melanoma Resection Guided by O-Arm-Navigated Intraoperative Computed Tomography. *Oper Neurosurg (Hagerstown)*. 2022.
- Clinical and Radiographic Comparisons among Minimally Invasive Lumbar Interbody Fusion: A Comparison with Three-Way Matching. *Asian Spine J*. 2022.
- Comparative Radiographic Analyses and Clinical Outcomes Between O-Arm Navigated and Fluoroscopic-Guided Minimally Invasive Transforaminal Lumbar Interbody Fusion. *Int J Spine Surg*. 2022.
- How Prone Position Affects the Anatomy of Lumbar Nerve Roots and Psoas Morphology for Prone Transpsoas Lumbar Interbody Fusion. *World Neurosurg*. 2022.
- Remodeling of the Lumbar Facet Joint After Full Endoscopic Resection for Lumbar Osteoid Osteoma: Case Report and Literature Review. *Int J Spine Surg*. 2022.
- Surgeons' perspective, learning curve, motivation, and obstacles of full-endoscopic spine surgery in Thailand: results from a nationwide survey. *Biomed Res Int*. 2022.
- Full-Endoscopic Anterior Odontoid Screw Fixation: A Novel Surgical Technique. *Orthop Surg*. 2022.
- Thoracolumbar Burst Fracture without Neurological Deficit: Review of Controversies and Current Evidence of Treatment. *World Neurosurg*. 2022
- Intradural disc herniation of L2/3: A case report and literature review. *N Am Spine Soc J*. 2022
- Transforaminal Versus Interlaminar Endoscopic Lumbar Discectomy for Lumbar Disc Herniation: A Systematic Review and Meta-Analysis. *Global Spine J*. 2022
- Successful Criteria for Indirect Decompression With Lateral Lumbar Interbody Fusion. *Neurospine*. 2022
- Incidence and risk factors associated with superior-segmented facet joint violation during minimal invasive lumbar interbody fusion. *Spine J*. 2022
- Predictive parameters for successful indirect decompression of the lateral lumbar interbody fusion (LLIF) surgery. *Interdis neuro surg*. 2022

Research and published articles (Cont.)

- Does the application of expandable cages in TLIF provide improved clinical and radiological results compared to static cages? A meta-analysis, *Front Surg.* 2022
- Transforaminal Versus Interlaminar Endoscopic Lumbar Discectomy for Lumbar Disc Herniation: A Systematic Review and Meta-Analysis, *Global Spine J.* 2022
- Current Status and research hotspots in the field of full endoscopic spine surgery: A bibliometric analysis, *Front Surg.* 2022
- Current Status and research hotspots in the field of full endoscopic spine surgery: A bibliometric analysis, *Front Surg.* 2022
- Identification of the circRNA-miRNA-mRNA regulatory network in osteoarthritis using bioinformatics analysis, *Front Genet.* 2022
- Comparison of PEEK and TiPEEK in Minimally Invasive Transforaminal Lumbar Interbody Fusion: a Randomized Clinical Trial, *World Neurosurg.* 2022
- Posterior Endoscopic Cervical Decompression in Metastatic Cervical Spine Tumors: An Alternative to Palliative Surgery, *J Am Acad Orthop Surg Glob Res Rev.* 2022
- Comparative Radiographic Analyses and Clinical Outcomes Between O-Arm Navigated and Fluoroscopic-Guided Minimally Invasive Transforaminal Lumbar Interbody Fusion, *Int J Spine Surg.* 2022
- Is Biportal Endoscopic Spine Surgery More Advantageous Than Uniportal for the Treatment of Lumbar Degenerative Disease? A Meta-Analysis, *Medicina (Kaunas).* 2022
- Global research hotspots and trends in the field of spine surgery during the COVID-19 pandemic: A bibliometric and visual analysis, *Front Surg.* 2022
- Comparison of oblique and transforaminal approaches to lumbar interbody fusion for lumbar degenerative disease: An updated meta-analysis, *Front Surg.* 2023
- Automatic Detection, Classification, and Grading of Lumbar Intervertebral Disc Degeneration Using an Artificial Neural Network Model, *Diagnostics (Basel).* 2023
- Full-endoscopic Lumbar Discectomy Approach Selection - A Systematic Review And Proposed Algorithm, *Spine (Phila Pa 1976).* 2023
- Transforaminal Versus Interlaminar Endoscopic Lumbar Discectomy for Lumbar Disc Herniation: A Systematic Review and Meta-Analysis, *Global Spine J.* 2023
- Minimally invasive endoscopy in spine surgery: where are we now?, *Eur Spine J.* 2023

Book and chapters

- Vit Kotheeranurak. *Basic Science of Intervertebral disc, vertebrae, nerve tissue and muscle*. in: Taweechai Techapongworachai. (Editor). Minimally Invasive Spine book, Spine society of Thailand; 2018
- Vit Kotheeranurak. *Percutaneous Laser Disc Decompression (PLDD)*. in: Taweechai Techapongworachai. (Editor). Minimally Invasive Spine book, Spine society of Thailand; 2018
- Vit Kotheeranurak. *Why endoscopic spine surgery would become a future of spine surgery*. in: Chutsana Suankratai. (Editor). Integrative medicine; 2020
- Vit Kotheeranurak. Managing lumbar spinal stenosis with endoscopic spine surgery. in: Wicharn Karnchanatawan. (Editor). Instructional course lecture RCOST 6; 2020
- Vit Kotheeranurak. Spinal dysraphism, Degenerative spondylolisthesis, Adjacent segment degeneration and Proximal junctional kyphosis, Cervical disc arthroplasty (surgical technique), Anterior lumbar interbody fusion (surgical technique). In: Areesak Chotvijit. (Editor). Textbook of Spine Surgery 3 vol.(SST); 2021
- Vit Kotheeranurak. O-arm Navigation-Guided Endoscopic Cervical Laminoforaminotomy. In: Jin-Sung Kim et al. (Editors). Technical Advances in Minimally Invasive Spine Surgery; Navigation, Robotics, Endoscopy, Augmented and Virtual Reality. Springer; 2022
- Vit Kotheeranurak. *Practical and Applied Anatomy for Full Endoscopic Spine Surgery, Full Endoscopic Drainage of Cervical Epidural Abscess, Endoscopic Discectomy-Assisted Oblique Lumbar Interbody Fusion, Full Endoscopic Posterior Decompression for Thoracic Myelopathy Caused by Ossified Ligamentum Flavum* in: Tun Hing Lui. (Editor). Endoscopy of the Spine. Springer; 2022
- Vit Kotheeranurak. in: Vit Kotheeranurak. (Editor). Basic Endoscopic Lumbar Surgery. CUPress; 2023

Lectures and conferences

Global spine conference, Toronto, Canada (2019)

- Risk factor for subsidence in OLIF surgery: Oral presentation

The 41st Annual meeting of the Royal College of Orthopedic Surgeons of Thailand and visiting JOA (2019)

- Treating high-grade down-migrated disc herniation with transforaminal endoscopic lumbar discectomy (TELD): Video surgical technique

The 1st MIS Spine Week of Thailand and 3rd ISESS meeting (2019)

- Case debate: Challenging case for Lumbar disc herniation
- Cervical disc arthroplasty: video surgical steps
- Managing high-grade down migrated lumbar disc herniation

Eurospine congress (2020): oral presentation

- Comparison of patient reported outcomes between transforaminal and interlaminar endoscopic discectomy in treating patients with paracentral-typed disc herniation: a randomized controlled trial study and preliminary report.

The 42nd Annual meeting of the Royal College of Orthopedic Surgeons of Thailand (2020)

- Instructional Course Lecture: Managing lumbar spinal stenosis with endoscopic decompression

Global spine conference, Paris, France (2021)

- Endoscopic approach for synovial cysts (invited lecturer)
- Clinical and Radiographic Outcomes of Cervical Disc Replacement (CDR) versus Posterior Endoscopic Cervical Decompression (PECD) A Matched-Pair Comparison Analysis

Global spine conference, Las Vegas, USA (2022)

- Endoscopic section2 (moderator)
- Uniportal endoscopy: it is my most versatile approach (invited lecturer)

Other academic activities

- Invited lecturer and endoscopic live surgery demonstrator throughout Thailand
- Course Director of The CU Endoscopic workshop, Orthopaedic department, Faculty of Medicine, Chulalongkorn University. (Annually held)