Final Program

Friday, July 28th, 2017

Room A

8:50 - 9:00 a.m.
Opening Remarks: Hiroaki Nakamura (Japan)

9:00 - 10:00 a.m.
General Session: Lumbar Spine
Moderators: Jae-Yoon Chung (Korea), Kuo-Yuan Huang (Taiwan)

9:00-9:05 a.m.
Less Is Better and Diagnosis before Surgery. --- Alternative Treatment of Lumbar Radiculopathy with Transforaminal Epidural Steroid Injections
Jui-Yang Hsieh, Yung-Chi Kao, Po-Quang Chen
Department of medical affairs, National Taiwan University Hospital Jinshan branch, Taiwan

9:05-9:10 a.m.
Different Clinical Results between Triamcinolone and Methylprednisolone ESI : Randomized Double Blind Prospective Study
Warat Tassanawipas, Srissok Pheeraphan, Poopitaya Sompob
Department of Orthopaedics, Army Hospital, Thailand

9:10-9:15 a.m.
A Prospective Comparative Study of Clinical Outcomes for Lumbar Spine Surgery in Elderly Patients Older than 80 years old Evaluated with JOABPEQ and Patient Satisfaction
Hiroyuki Yasuda¹, Shumpei Hama¹, Sadahiko Konishi¹, Akinobu Suzuki², Hiroaki Nakamura²
¹Osaka General Hospital of West Japan Railway Company, Osaka, Japan
²Osaka City University Graduate School of Medicine, Japan
9:15-9:20 a.m.
Degenerative Spondylolisthesis (Ds); Is it Always Unstable? - A New Scoring System To Implement Value Based Spine Care
Arvind Gopalrao Kulkarni, Dutta Shumayou
Mumbai Spine Scoliosis & Disc Replacement Centre, Bombay Hospital Mumbai, India

9:20-9:30 a.m.
Discussion

General Session: Lumbar Spine
Room A
Moderators: Jae-Yoon Chung (Korea), Zheng Zhao Min (China)

9:30-9:35 a.m.
Correlations between the SF-36, the Oswestry-Disability Index and Rolland-Morris Disability Questionnaire in Patients Undergoing Lumbar Decompression According to Types of Spine Origin Pain
Sangbong Ko, Jaebum Kwon, Seungbum Chae, Wonkee Choi
Daegu Catholic University Medical Center, Korea

9:35-9:40 a.m.
Prevalence of High-intensity Zones in the Lumbar Spine According to Age and Their Correlation with Other Degenerative Findings on Magnetic Resonance Imaging
Makoto Takeuchi, Akihiro Nagamachi, Keisuke Adachi, Kazumasa Inoue, Yasuaki Tamaki, Yasuyuki Omichi, Koichi Sairyo
Department of Orthopedics, Tokushima University, Japan

9:40-9:45 a.m.
Correlation between Sedimentation Sign, Dural Sac Cross-sectional Area and Clinical Symptoms of Degenerative Lumbar Spinal Stenosis
Sangbong Ko, Jaebum Kwon, Seungbum Chae, Wonkee Choi
Daegu Catholic University Medical Center, Korea

9:45-9:50 a.m.
Correlation between Cervical and Lumbar Spinal Canal Diameter: Analysis of CT scan in 256 Korean Population
Kyung-Chung Kang, Kim Ki-Tack, Lee Jung-Hee, Kim Yong-Chan
Kyung Hee University Hospital at Kangdong, Korea
10:00-10:05 a.m.
Minimally Invasive Posterior Microscopic Foraminotomy can Improve Radicular Pain and the Alignment of Cervical Spine after Surgery
Yoshikazu Yanagisawa¹, Hiroshi Nomura¹, Toshio Doi¹, Junichi Arima¹
¹Hiroshima Red Cross Hospital & Atomic-bomb Survivors Hospital, Japan

10:05-10:10 a.m.
Clinical Results of Posterior Cervical Microendoscopic Surgery for Cervical Spondylotic Amyotrophy
Yukihiro Nakagawa, Hiroshi Yamada, Hiroshi Hashizume, Yasutsugu Yukawa, Akihito Minamide, Hiroshi Iwasaki, Shunji Tsutsui, Masanari Takami, Ryohei Kagotani,
Department of Orthopaedic Surgery, Wakayama Medical University, Japan

10:10-10:15 a.m.
Surgical Results of Cervical Micro Endoscopic Laminectomy for Cervical Myelopathy
Atsushi Tagami, Makoto Osaki,
Department of Orthopedic Surgery, Nagasaki University, Japan

10:15-10:20 a.m.
Factors Relating Successful Ventilator Weaning in Cervical Spinal Cord-Injured Patients
Torphong Bunmaprasert, Kanlaya Chunjai,
Chiang Mai University, Thailand

10:20-10:30 a.m.
Discussion
10:30-10:35 a.m.
Full-endoscopic Cervical Foraminotomy is a Promising Surgery for Lower-level Cervical Spondylotic Radiculopathy

Koichiro Ono, Kazuo Ohmori, Takeshi Hori,
Center for Spinal Surgery, Nippon Koukan Hospital, Japan

10:35-10:40 a.m.
Percutaneous Endoscopic Cervical Decompression- Anterior, Transcorporeal and Posterior Approach

Fujio Ito¹, Zenya Ito¹, Motohide Shibayama¹, Shu Nakamura¹, Minoru Yamada¹, Naoto Hoshi¹, Kenzo Shimizu¹, Yasushi Miura²,
¹Aichi Spine Hospital, Japan
²Tokyo Spine Institute

10:40-10:45 a.m.
The Natural Course of Prevertebral Soft-tissue Swelling after Anterior Cervical Spine Surgery; How long will it last?

Seok Woo Kim¹, Chulyoung Jang², Myung Ho Yang², Seonjong Lee¹, Je Hyun Yoo², Yoon Hae Kwak², Ji Hyo Hwang³, Jin-Hyok Kim⁴
¹Spine Center, Korea
²Department of Orthopaedic Surgery Hallym University Sacred Heart Hospital
³Kangnam Sacred Heart Hospital College of Medicine, Hallym University
⁴Inje University Sanggye Paik Hospital Orthopaedic Department

10:45-10:50 a.m.
Reoperation Rate of Microscope-Assisted and Non-Microscope Anterior Cervical Discectomy and Fusion (ACDF) for Treatment of Degenerative Cervical Myeloradiculopathy

Torphong Bunmaprasert. Boonserm Pakdeenit,
Chiang Mai University, Thailand

10:50-11:00 a.m.
Discussion
11:00 - 11:50 a.m.

General Session: Best papers
Room A
Moderators: Po-Quang Chen (Taiwan), June Kyu Lee (Korea)

11:00-11:07 a.m.
Efficacy of E.coli-derived rhBMP-2 in Posterolateral Lumbar Fusion: an open, active-controlled, randomized, multicenter trial
Jae Hyup Lee 1, Jae Hwan Cho 2, Jin Sup Yeom 1, Bong-Soon Chang 1, Jae Jun Yang 3, Ki Hyoung Koo 3, Chang Ju Hwang 2, Ho-Joong Kim 1, Choon-Ki Lee 1, Hyoungmin Kim 1, Kyung-Soo Suk 5

1Department of Orthopaedic Surgery, College of Medicine, Seoul National University, Korea
2Department of Orthopedic Surgery, Asan Medical Center, University of Ulsan College of Medicine
3Spine Center and Department of Orthopaedic Surgery, Seoul National University College of Medicine, Seoul National University Bundang Hospital
4Department of Orthopedic Surgery, Dongguk University Ilsan Hospital, Dongguk University College of Medicine
5Department of Orthopaedic Surgery, Gangnam Severance Hospital, Yonsei University College of Medicine

11:07-11:14 a.m.
Comparing Clinical Results between Minimally Invasive Endoscopic Surgery and Traditional Anterior Open Surgery for Infectious Spondylodiscitis: A Cohort Study of 84 Patients
Hsien-Te Chen, Yen-Jen Chen, Chien-Chun Chang, Mao-Wang Ho, Horng-Chaung Hsu, China medical university hospital, Taiwan, Taiwan

11:14-11:21 a.m.
The Incidence of Additional Spine Surgery after Microscopic Decompression Surgery for Lumbar Canal Stenosis: An Average Nine-year follow-up Using a Surgical Database Study from A Single Institute
Yasushi Fujiwara, Izumi Bunichiro, Ryo Ota, Yutaka Kadonishi, Takahiro Harada, Kazuto Nakao, Tomokazu Yoshida, Makoto Nishimori, Hideki Manabe
Hiroshima City Asa Hospital, Japan
11:21-11:28 a.m.
Good Clinical Outcomes in Nonunion Cases after Facet Fusion with A Percutaneous Pedicle Screw System for Degenerative Lumbar Spondylolisthesis

**Tomohiro Miyashita**, Hiromi Ataka, Kei Kato, Hiromitsu Takaoka, Takaaki Tanno, 
1Spine Center, Matsudo City Hospital, Japan
2Society for Minimally Invasive spine Stabilization
3Spine Center, Matsudo Orthopaedic Hospital

11:28-11:35 a.m.
Clinical Application of PSLD (Percutaneous Stenoscopic Lumbar Decompression) in Degenerative Lumbar Spine Diseases

**KangTaek Lim.**
Good Doctor Teun Teun Hospital, Korea

11:35-11:50 a.m.
Discussion

12:00 -13:00

Luncheon seminar: Sohei Ebara (Japan)
Room A
Moderators: Akira Dezawa (Japan)

13:20 -13:50

PASMISS seminar: Zenya Ito (Japan)
Room A
Moderators: Masatsune Yamagata (Japan)

14:00 -15:00

General Session: Micro/MED
Room A
Moderators: Heui Jeon Park (Korea), Hiroshi Yamada (Japan)

14:00-14:05
Stand-alone Lateral Recess Decompression without Discectomy in Patients Presenting with Neurogenic Claudication and MRI evidence of Large Disc Protrusions: A five year study &acute;

**Arvind Gopalrao Kulkarni**, Patel Ravish,
Mumbai Spine Scoliosis & Disc Replacement Centre, Bombay Hospital Mumbai, India
14:05-14:10
Prevalence and Impact on Outcome of Reoperation Following Minimally Invasive Decompression Alone for Degenerative Lumbar Disease

Minori Kato¹, Takashi Namikawa¹, Akira Matsumura¹, Yudai Sawada¹, Masyoshi Iwamae¹, Hiroaki Nakamura²
¹Department of Orthopaedic Surgery, Osaka City General Hospital, Japan
²Department of Orthopaedic Surgery, Osaka City University Graduate School of Medicine

14:10-14:15
Comparative Outcome Between Microscopic Decompression Without Posterior Stabilization and Open Decompression With Posterior Stabilization for Lumbar Disc Herniation: A Case Series Study

I Glna Artha Wiguna, I Ketut Suyasa, I GN Yudhi Setiawan, Trimanto Wibowo, Tjok Agung Vidyaputra,
Orthopaedic Department Medical Faculty Udayana University Denpasar Bali, Indonesia

14:15-14:20
Pros & cons of percutaneous endoscopic interlaminar approach versus microendoscopic technique

Akira Dezawa,
Dezawa Akira PED Clinic

14:20-14:30
Discussion

General Session: Micro/MED
Room A
Moderators: Heui Jeon Park (Korea), Eung Ha Kim (Korea)

14:30-14:35
Surgical Experiences in Lumbar Disc Herniation by Minimal Invasive Surgery in Sanglah General Hospital: A Case Series

I Ketut Suyasa, I GLNA Artha Wiguna, I GN Yudhi Setiawan, Trimanto Wibowo, Tjok Agung Vidyaputra
Orthopaedic Department Medical Faculty Udayana University Denpasar Bali, Indonesia

14:35-14:40
Advanced MED Surgery with Lens-cleaning System and 10 mm-TR

Motohide Shibayama, Fujio Ito, Zenya Ito, Yasushi Miura, Shu Nakamura, Minoru Yamada, Naoto Hoshi
Aichi Spine Hospital, Japan
14:40-14:45
Micro-endoscopic Decompression Surgery via Midline Approach for Lumbar Spinal Canal Stenosis - Clinical Results and Radiological Assessments after more than 10 years of follow-up -
Masateru Nagae¹, Yasuo Mikami², Tomonori Itsuji¹, Hitoshi Tonomura¹, Ryota Takatori¹, Munehiro Sakata¹, Tomohisa Harada³, Toshikazu Kubo¹,
¹Department of Orthopaedics, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan
²Department of Rehabilitation Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine
³Department of Spine Surgery, Rakuwakai Marutamachi Hospital

14:45-14:50
Learning Curve of Micro-endoscopic Discectomy in An-Nan Hospital: Results of First 25 Cases
Cheng-Hsin Cheng, Ruey-Mo Lin
AN-Nan hospital, spinal care center, Taiwan

14:50-15:00
Discussion

15:00-16:00

General Session: LLIF1
Room A
Moderators: Ruey-Mo Lin (Taiwan), Tiksnadi Bambang (Indonesia)

15:00-15:05
The Fate and Clinical Impact of Early Cage Subsidence after OLIF Surgery
Se-Jun Park, Chong-Suh Lee, Sung-Soo Chung, Kyung-Jun Lee, Chan-Duk Park, Hyung-Ju Kim,
Samsung Medical Center, Korea

15:05-15:10
A New Surgical Technique to Avoid Iatrogenic End Plate Injury in XLIF Procedure
Takahiro Maeda¹, Hiroshi Yamada¹, Yasutsugu Yukawa¹, Hiroshi Hashizume¹, Akihito Minamide¹, Yukihiro Nakagawa¹, Hiroshi Iwasaki¹, Shunji Tsutsui¹, Masanari Takami¹, Munehito Yoshida²,
¹Wakayama Medical University, Japan
²Sumiya Orthopedic Hospital
15:10-15:15
Radiographic Evaluation of Intervertebral Cage Subsidence in Lateral Retroperitoneal Transpsoas Lumbar Interbody Fusion
Shunji Tsutsui¹, Hiroshi Yamada¹, Hiroshi Hashizeme¹, Yasutsugu Yukawa¹, Akihito Minamide¹, Yukihiro Nakagawa¹, Hiroshi Iwasaki¹, Masanari Takami¹, Ryohei Kagotani¹, Shinichi Nakao², Munehito Yoshida²
¹Department of Orthopedic Surgery, Wakayama Medical University, Japan
²Sumiya Orthopedic Hospital

15:15-15:20
Early and Midterm Complications in Oblique Lumbar Interbody Fusion Surgery
Reza Rahim, John Choi,
Spine Ortho Clinic Melbourne, Australia

15:20-15:30
Discussion

General Session: LLIF1
Room A
Moderators: Ruey-Mo Lin (Taiwan), Dae Moo Shim (Korea)

15:30-15:35
Fusion Rates in Oblique Lumbar Interbody Fusion
Reza Rahim, John Choi,
Spine Ortho Clinic Melbourne, Australia

15:35-15:40
Fusion Rate and Its Predictive Factors Following Lateral Lumbar Interbody Fusion in Multilevel Instrumented Spinal Surgery
Yu Moriguchi¹, Takashi Kaito², Hiroyasu Fujiwara¹, Takenori Oda¹, Hiroyuki Tsukazaki¹,
¹National Hospital Organization Osaka Minami Medical Center, Japan
²Osaka University
Comparison of Surgical Results between Minimally Invasive LLIF and Open PLIF in the Treatment of Spondylolisthesis

Chul Lee Jae, Hae-Dong Jang, Sung-Woo Choi, Eung-Ha Kim, Jong-Beom Park, Hak-soo Kim, Byung-Joon Shin.

1Department of Orthopedic Surgery, Soonchunhyang University Seoul Hospital, Seoul, Korea
2Department of Orthopedic Surgery, Soonchunhyang University Bucheon Hospital, Bucheon, Korea
3Department of Orthopedic Surgery, Uijeongbu St. Mary's Hospital, College of Medicine, The Catholic University of Korea, Seoul, Korea

Efficacy of Vertebral Rotational Reduction by Using Lateral Lumbar Interbody Fusion for Cases with Adult Spinal Deformity


1Dept. of Orthop. Surg., Wakayama Medical Univ., Japan
2Dept. of Orthop. Surg., Sumiya Orthopaedic Surgery Hospital

Discussion

General Session: MIST
Room A
Moderators: Koji Sato (Japan), Takanori Saito (Japan)

Preliminary Report of Stand-Alone Transforaminal Lumbar Interbody Fusion with Cage

Cheng-Hsin Cheng, Ruey-Mo Lin, Yen-Po Fang,
AN-Nan hospital, spinal care center, Taiwan

Minimally Invasive Transforaminal Lumbar Interbody Fusion (TLIF): Clinical Application and Learning Curve

Jae-Young Hong, Seung-Woo Suh, Si-Young Park, Jae-Hyuk Yang,
Korea University Medical Center, Korea
16:10-16:15
2 Level Lumbar Degenerative Disease that was Treated with MIS-TLIF for Minimum 2-years follow up

Hyun Seung Yoo ¹, Se Ang Chang, Young bo Park,
¹Daegu Fatima Hospital, Korea
²Daegu Fatima Hospital
³Daegu Fatima Hospital

16:15-16:20
Radiation reduction of minimally invasive transforaminal lumbar interbody fusion with localization system in overweight patients

Guoxin Fan, Shisheng He,
Shanghai Tenth People’s Hospital, Tongji University School of Medicine, China

16:20-16:30
Discussion

General Session: MISt
Room A
Moderators: Kazuo Nakanishi (Japan), Chang-Hoon Jeon (Korea)

16:30-16:35
Early Result of Microendoscopy-assisted Minimal Invasive Transforaminal Lumbar Interbody Fusion for Lumbar Degenerative Disease

Yu-Han Huang,
Yumin Medical Corporation Yumin Hospital, Taiwan

16:35-16:40
Minimally Invasive Transforaminal Lumbar Interbody Fusion (MIS-TLIF) in the Use of Intraoperative Computed Tomography (iCT) with Navigation System

Yen-Yao Li, Chin-Chang Cheng, Ching-Yu Lee, Chien-Ying Lee,
Department of Orthopaedic Surgery, Chiayi Chang-Gung Memorial Hospital, Taiwan

16:40-16:45
Early Failure of Cortical Bone Screw Fixation in the Lumbar Spine: A Single Institutional Experience

Yung Park,
National Health Insurance Service Ilsan Hospital, Yonsei University College of Medicine, Korea
16:45-16:50
Discussion

17:00 -18:00
Evening seminar: Tomoaki Toyone (Japan)
Room A
Moderators: Munehito Yoshida (Japan)

18:00 -18:40
General Session: Best Poster
Room A
Moderators: Seok-Woo Kim (Korea), Koichi Sairyo (Japan)

18:00-18:04
Survival Analysis based on New Fracture at Adjacent Vertebrae after Vertebroplasty or Kyphoplasty
Jung-Hoon Kim1, Jeong-Gook Seo2, Dong-Hyok Kim1,
1Department of Orthopedic Surgery, Inje University Ilsan Paik Hospital, Korea
2Department of Orthopedic Surgery, Inje University Soeul Paik Hospital

18:04-18:08
Clinical and Radiological Outcome of Muscle-preserving Interlaminar Decompression for Lumbar Spinal Canal Stenosis in Patients with or without Kissing Spine
Hitoshi Tonomura1, Yoichiro Hatta2, Masaru Nonomura2, Hironori Koike1, Ryota Takatori1,
Masateru Nagae1, Yasuo Mikami3, Toshikazu Kubo1,
1Department of Orthopaedics, Graduate School of Medical Science, Kyoto Prefectural University of Medicine, Japan
2Department of Orthopaedics, Japanese Red Cross Kyoto Daini Hospital
3Department of Rehabilitation Medicine, Graduate School of Medical Science, Kyoto Prefectural University of Medicine

18:08-18:12
Minimally Invasive Percutaneous Correction for Degenerative Lumbar Scoliosis more than Cobb Angle 30 Degrees with Lateral Interbody Fusion and Percutaneous Pedicle Screw System
Tomohisa Harada,
Dept. of Orthop. Surg., Rakuwakai Marutamachi Hospital, Japan
18:12-18:16
Radiological and Clinical Long-term Results of Heterotopic Ossification following Lumbar Total Disc Replacement
Chong-Suh Lee, Se-Jun Park, Sung-Soo Chung, Kyung-Jun Lee, Chan-Duk Park, Hyung-Ju Kim, Samsung Medical Center, Korea

18:16-18:20
Radiological Status of Paravertebral Muscles after Biportal Endoscopic Spinal Surgery (BESS)
Ho-Jin Lee¹, Jae-sung Ahn¹, Dae-jung Choi², Ki-young Lee¹,
¹Department of Orthopedic Surgery, Chungnam National University School of Medicine, Daejeon, Korea., Korea
²Spine center, Barun Hospital, Jin-ju, Korea.

18:20-18:24
Association between Droopy Shoulder and Degenerative Changes in the Cervical Spine
Kazushi Takayama, Atsushi Masuda, Teruo Kita, Hideki Sakanaka, Yoshiki Yamano, Dept. of Orthopaedic Surgery, Seikeikai Hospital, Japan

18:24-18:28
Does Additional Uncinate Resection Increase Pseudarthrosis Following Anterior Cervical Discectomy and Fusion?
Je Won Paik¹, MD, Dong-Eun Shin², Jong-Min Baik³, MD, Dong-Ho Lee⁴, MD, PhD,
¹Department of Orthopedic Surgery, Gil medical center, Incheon, Korea
²Department of Orthopedic Surgery, CHA Bundang medical center, Gyeonggi, Korea
³Department of Orthopedic Surgery, Gil medical center, Incheon, Korea
⁴Department of Orthopedic Surgery, Asan medical center, Seoul, Korea

18:28-18:40
Discussion
15:00-15:05
Radiculopathy Due to Retropulsed Bony Fragments After Kyphoplasty- Its Clinical Manifestation and Treatment
Chung-Ting Wu¹, Po-Quang Chen²,
¹ Department of orthopedic surgery, Cathay General Hospital, Taiwan
² Department of orthopedic surgery, National Taiwan University hospital

15:05-15:10
Stabilizing the Unstable Osteoporotic Vertebral Fracture is Critical to Preventing the Further Progression of Spinal Canal Stenosis due to Fractured Vertebrae
Toshihiro Imamura¹, Yukihide Iwamoto²,
¹ The Center for Research and Treatment of Bone and Joint Disease for Workers, Dept. of Orthopaedic Surgery, Kyushu Rosai Hospital, Japan
² Kyushu Rosai Hospital

15:10-15:15
Comparison of Percutaneous Vertebroplasty with and without Kyphoplasty by SpineJack for the Treatment of Elderly Vertebral Compression or Burst Fractures
Yen-Po Fang¹, Ruey-Mo Lin¹, Wei-Chien Hsu¹, Jing-Jing Fang²,
¹ Department of Orthopedics, An Nan Hospital- China Medical University, Tainan, Taiwan, Taiwan
² Department of Mechanical Engineering, National Cheng Kung University, Tainan, Taiwan

15:15-15:20
Clinical Outcomes of Percutaneous Kyphoplasty Alone for Thoracolumbar Burst Fractures in Elderly Patients
Ju-Feng Hsueh, Jwo-Luen Pao, Chih-Hung Chang,
Far-Eastern Memorial Hospital, Taiwan

15:20-15:30
Discussion
General Session: OVF/BKP
Room B
Moderators: Luthfi Gatam (Indonesia), Yi Hung Huang (Taiwan)

15:30-15:35
Risk Factors for Newly Developed Vertebral Compression Fractures Following Treatment for Osteoporotic Vertebral Compression Fractures

Dong-Yun Kim¹, Chang-Nam Kang¹, Chul-Woong Kim²,
¹Department of Orthopaedic Surgery, Hanyang University College of Medicine, Korea
²Medi-yin hospital, Paju-si, Gyeonggi-do, Republic of Korea

15:35-15:40
Prophylactic Augmentation Effectively Decrease the Fracture Risk of Adjacent Vertebrae after Vertebroplasty or Kyphoplasty

Jwo-Luen Pao,
Far Eastern Memorial Hospital, Taiwan

15:40-15:45
Adequate Cement Volume for over 40% Collapsed Thoracolumbar Osteoporotic Vertebral Compression Fractures with Percutaneous Ballon Kyphoplasty

Jae Chul Byun, Young Woo Kim, Hyun Min Chung, Hyung Jin Kim,
Department of Orthopaedic Surgery, Dongtan Sacred Heart Hospital, Hallym University College of Medicine, Korea

15:45-15:50
Radiological Results of Double Balloon Inflation Technique during Kyphoplasty

Sung Kyun Oh¹, Dae Moo Shim², Tae Kyun Kim²,
¹Wonkwang University Sanbon Hospital Orthopedic Surgery, Korea
²Wonkwang University Hospital Orthopedic Surgery

15:50-16:00
Discussion
16:00-16:05
mRNA LBX1 Genome Expression as Distinct Susceptibility Profile for Adolescent Idiopathic Scoliosis In Indonesia

Yudha Mathan Sakti¹, Heriyanto Didik Setyo², Saputra Marda Ade¹, Lanodiyu Zikrina Abyanti¹, Magetsari Rahadyan¹,
¹Department of Orthopaedic and Traumatology Sardjito General Hospital/Faculty of Medicine Universitas Gadjah Mada, Yogyakarta, Indonesia, Indonesia
²Department of Anatomical Pathology Sardjito General Hospital Faculty of Medicine Universitas Gadjah Mada

16:05-16:10
Novel Correlation of mRNA Estrogen Receptor (ESR) Genome Expression in Adolescent Idiopathic Scoliosis Cases

Didik Setyo Heriyanto¹, Sakti Yudha Mathan², Saputra Marda Ade², Lanodiyu Zikrina Abyanti², Magetsari Rahadyan²,
¹Department of Anatomical Pathology Sardjito General Hospital Faculty of Medicine Universitas Gadjah Mada Yogyakarta Indonesia, Indonesia
²Department of Orthopaedic and Traumatology Sardjito General Hospital/ Faculty of Medicine Universitas Gadjah Mada Yogyakarta Indonesia

16:10-16:15
The Differentiation Property and Behavior in Progenitor Cells of Vertebral Endplate, Disc and Ligamentum Flavum

Kuo-Yuan Huang¹, Ruey-Mo Lin², Lynn L.H. Huang³,⁴, Ming-Shi Chang⁵,
¹Department of Orthopedics, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan, Taiwan
²Department of Orthopedics, China Medical University - An Nan Hospital, Tainan, Taiwan
³Institute of Biotechnology, College of Biosci & Biotech, National Cheng Kung University, Tainan, Taiwan.
⁴Institute of Clinical Medicine, College of Medicine, National Cheng Kung University, Tainan, Taiwan.
⁵Graduate Institute of Biochemistry and Molecular Biology, College of Medicine, National Cheng Kung University, Tainan, Taiwan.
16:15-16:20
Material Characterization of a Synthetic, Highly Resorbable Calcium-based Bone Substitute and its Clinical use in Filling Implant Removal-derived Bone Defects

**Sheng-Min Lan¹, Bing-Chen Yang², Wei-Ti Chin³, Chieh-Yu Lin³, Wei-Hua Wang², Chia-Ling Ko³, Chien-Ping Ju², Jiin-Huey Chern Lin²,**
¹Dept. of Orthopaedics, National Cheng-Kung University Medical Center Dou-Liou Branch, Taiwan
²Dept. of Materials Science and Engineering, National Cheng-Kung University, Tainan, Taiwan
³Joy Medical Devices Corp., Taiwan

16:20-16:30
Discussion

16:30-16:35
Bioavailability of Human Osteoblast and Fibroblast Cells Towards In-House Machinery Processing of Titanium Alloy Grade 2 and Stainless Steel 316 L

**Yudha Mathan Sakti¹, Suyitno Suyitno², Lanodiyu Zikrina¹, Respati Suryadharma¹, Novito Kiki³, Budhiparana Nicolaas³, Magetsari Rahadyan¹,**
¹Department of Orthopaedic and Traumatology Sardjito General Hospital/Faculty of Medicine Universitas Gadjah Mada, Yogyakarta, Indonesia
²Department of Mechanical and Industrial Engineering, Faculty of Engineering, Universitas Gadjah Mada, Yogyakarta, Indonesia
³Department of Orthopaedic and Traumatology Jakarta Medistra Hospital, Indonesia

16:35-16:40
Biomechanical Insertion Properties on Different Thread and Core Design of Indonesian Customized Pedicle Screw (Comparison of V-Thread Cylinder Core, Square-Thread Cylinder Core and Square-Thread Conical Core)

**Yudha Mathan Sakti¹, Saputra Marda Ade¹, Iskandar Ronald¹, Lanodiyu Zikrina Abyanti¹, Suyitno Suyitno², Magetsari Rahadyan¹,**
¹Department of Orthopaedic and Traumatology Sardjito General Hospital/Faculty of Medicine Universitas Gadjah Mada, Yogyakarta, Indonesia
²Department of Mechanical and Industrial Engineering, Faculty of Engineering, Universitas Gadjah Mada, Yogyakarta, Indonesia
Osteoporotic goat spine implantation study with a newly-developed Ca-based bone void-filler

Jiin-Huey Chern Lin¹, Sheng-Min LAN², Jing-Wei LEE³, Bing-Chen YANG¹, Chien-Ping JU¹
¹Department of Materials Science and Engineering, National Cheng-Kung University, Tainan, Taiwan, ROC, Taiwan
²Department of Orthopedics, National Cheng-Kung University Hospital Dou-Liou Branch, Yunlin, Taiwan, ROC
³Department of Surgery, National Cheng-Kung University Hospital, Tainan, Taiwan, ROC

16:45-16:50
Discussion

17:00 - 18:00
Evening seminar 2: Jun Mizutani (Japan)
Room B
Moderators: Toru Hasegawa (Japan)