**Oral 6 : Trauma**

**Chairs** : Tomoyuki Noda *(Department of Musculoskeletal Traumatology, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan)*

**Jae-Woo Cho** *(Department of Orthopaedic Surgery, Guro Hospital, Korea University Medical Center, Korea)*

**O06-1** Radial translation as a predictor of functional outcome in distal radius fractures

Seong-Hee Cho, Byeong-Hun Kang, Jin-Sung Park
*Department of Orthopaedic Surgery, Gyeongsang National University School of Medicine, Korea*

**O06-2** Treatment of femoral shaft fracture associated with proximal femoral fracture

Masahiro Kiyono, Tomoyuki Noda, Yasuaki Yamakawa, Tadashi Komatsubara, Masahide Yoshimura, Kazuhisa Sugiu, Ryuiti Nakahara, Yasunori Shimamura, Toshifumi Ozaki
*Department of Orthopaedics, Okayama University, Japan*

**O06-3** Malalignment after minimally invasive plate osteosynthesis for the distal femoral fractures

Joon-Woo Kim, Chang-Wug Oh, Joo-Chul Ihn, Byung-Chul Park
*Department of Orthopaedic Surgery, Kyungpook National University Hospital, Korea*

**O06-4** Rim Plating of Posterolateral Fragment (PLF) through Modified Anterolateral Approach in Tibial Plateau Fractures

Jae-Woo Cho, Jong-Keon Oh, Jinil Kim, Won-Tae Cho, Jin-Gak Kim
*Department of Orthopaedic Surgery, Guro Hospital, Korea University Medical Center, Korea*
O06-5 Minimally invasive plate osteosynthesis for periprosthetic tibial fractures after total knee arthroplasty
Joon-Woo Kim, Chang-Wug Oh, Hee-Soo Kyung, Joo-Chul Ihn, Byung-Chul Park
Department of Orthopaedic Surgery, Kyungpook National University Hospital, Korea

O06-6 A case report of the infected pseudo-arthrosis of the distal femur treated by Masquelet technique
Takeshi Doi
Department of Orthopaedic Surgery, Okayama Red Cross General Hospital, Japan

9:18-10:06

Oral 7: Foot and Ankle

Chairs: Kenta Saiga (Department of Orthopaedic Surgery, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan)
Hak Jun Kim (Department of Orthopaedic Surgery, Guro Hospital, Korea University College of Medicine, Korea)

O07-1 Anterior osteophytes resection of the ankle joint to increase range of the ankle motion in haemophilic patients
Bio Jeong 1), Jae Hoon Lee 2), Sang Hoon Lee 2), Myung Chul Yoo 3)
1) Department of Orthopaedic Surgery, Kyung Hee University Medical Center, Korea
2) Department of Orthopaedic Surgery, Kyung Hee University Hospital at Gangdong, Korea
3) Department of Orthopaedic Surgery, Chung Hospital, Korea

O07-2 Total Ankle Arthroplasty(TAA) in Haemophilic Arthropathy in Ankle
Myung Chul Yoo 1), Bio Jeong 2), Sang Hoon Lee 3)
1) Department of Orthopaedic Surgery, Chung Hospital, Korea
2) Department of Orthopaedic Surgery, Kyung Hee University Medical Center, Korea
3) Department of Orthopaedic Surgery, Kyung Hee University Hospital at Gangdong, Korea
O07-3  Does Orthosis Improve Radiological Parameters in Flexible Flatfoot?  
Kwang-Won Park, Chandong Jeong, Young-Sik Jeon, Tae Jin Lee, Jawoon Lee, Sung Eun Kim, Hae-Ryong Song  
Department of Orthopaedic Surgery, Korea University Medical School, Guro Hospital, Korea

O07-4  Clinical comparison of the two-stranded single Krackow and four-stranded double Krackow techniques for acute Achilles tendon ruptures  
Hak Jun Kim, Gi Won Choi, Young Hwan Park, Tae Hoon Lee  
Department of Orthopaedic Surgery, Korea University, College of Medicine, Korea

O07-5  Spontaneous Rupture of Bilateral Achilles Tendons in a Patient Undergoing Long-Term Emodialysis  
Kei Nakamura, Yasuhiro Hasegawa, Yoshiki Okada  
Takasago Municipal Hospital, Japan

O07-6  Myogelosis of the Soleus and the Peroneus Brevis Lowers Deep Pain Threshold in the Leg and Foot  
Shoichi Kokubun  
Research Center for Spine and Spinal Cord Disorders, NHO Sendai Nishitaga Hospital, Japan

10:15-10:55

Oral 8 : Spine 1

Chairs : Katsuji Shimizu (Department of Orthopaedic Surgery, Spine Centre, Gifu Municipal Hospital, Japan)  
Jae-Yoon Chung (Gwangju Hyundae Hospital, Korea)

O08-1  Minimal Invasive Surgical Technique in Adolescent Idiopathic Scoliosis Surgery: A case series study  
Jae Hyuk Yang1), Dong-Gune Chang2), Seung Woo Suh1), Soo Hyun Kim1), Chang Hwa Ham1)  
1) Scoliosis Research Institute, Department of Orthopaedics, Korea University Guro Hospital, Korea  
2) Department of Orthopaedics, Inje University, Sanggye Baek Hospital, Korea
O08-2 Comparative Analysis between Minimal Invasive and Conventional Correction Surgery in Adolescent Idiopathic Scoliosis
Seung Woo Suh¹, Dong-Gune Chang², Jae Hyuk Yang¹, Tae Jin Lee¹
¹Scoliosis Research Institute, Department of Orthopaedics, Korea University Guro Hospital, Korea
²Department of Orthopaedics Inje University Sanggye Baek Hospital, Korea

O08-3 Accuracy of the Free-hand Technique in Pedicle Screw Insertion for the Correction of the Scoliosis Deformity with Fusion Mass
Seung Woo Suh¹, Dong-Gune Chang², Jae Hyuk Yang¹
¹Scoliosis Research Institute, Department of Orthopaedics, Korea University Guro Hospital, Korea
²Department of Orthopaedics Inje University Sanggye Baek Hospital, Korea

O08-4 Effect of pedicle screw placement on development of the pedicle, spinal canal and vertebral body in young children
Futoshi Asano, Satoshi Inami, Hiroshi Moridaira, Daisaku Takeuchi, Haruki Ueda, Yo Shiba, Makoto Ohe, Hiromichi Aoki, Takafumi Chiba, Shuhei Oba, Yutaka Nohara, Hiroshi Taneichi
Department of Orthopedic Surgery, Dokkyo Medical University School of Medicine, Japan

O08-5 Optimal lumbar lordosis matched with pelvic incidence is strongly affected by a shape of the vertebral body
Takuya Iimura¹, Inami Satoshi¹, Hiroshi Moridaira¹, Daisaku Takeuchi¹, Haruki Ueda¹, You Shiba², Ooe Makoto³, Hutoshi Asano¹,
Yutaka Nohara¹, Hiroshi Taneichi¹
¹Department of Orthopaedic Surgery, Dokkyo Medical University, Japan
²Department of Orthopaedic Surgery, Dokkyo Medical University, Nikko Medical Center, Japan
³Department of Orthopedic Surgery, Kamitsuga Sogo Hospital, Japan
Oral 9 : Spine 2

Chairs: Tetsuya Tamaki (Aitoku Medical & Welfare Center, Japan)
Dong-Gune Chang (Department of Orthopaedic Surgery, Inje University Sanggye Paik Hospital, Korea)

O09-1 Chondroitinase ABC chemonucleolysis for intervertebral disc—from basic science to clinical application-
Hisashi Iwata 1), Fumihiko Kato 2), Yukihiro Matsuyama 3)
1) Department of Orthopaedic Surgery Nagoya Kyoritu Hospital, Japan
2) Department of Orthopaedic Surgery Chubu Rosai Hospital, Japan
3) Department of Orthopaedic Surgery Hamamatsu Medical University, Japan

O09-2 Incidentally Detected Lower Thoracic Lesions in Extended Lumbar Spine MRI
Sung-Kyu Kim 1), Jae-Yoon Chung 1, 2), Hyoung-Yeon Seo 1), Young-Woo Chung 1), Tae-Min Lee 1)
1) Department of Orthopaedic Surgery, Chonnam National University Hospital, Korea
2) Department of Orthopaedic Surgery, Gwangju Hyundai Hospital, Korea

O09-3 Fatal cervical spine injury in traumatic cardiac arrest: diagnosed by Post Mortem Computed Tomography
Keitaro Tada, Takamitsu Tokioka, Jiro Yamamoto, Takahiro Hayashi
Kochi Health Sciences Center, Orthopaedic Surgery, Japan

O09-4 Minimally invasive upper cervical spinal posterior fixaton - A new technique of C1 lateral mass screw insertion via posterolateral approach-
Takamitsu Tokioka, Takahiro Hayashi, Keitarou Tada, Ryu Tamara, Yutarou Hazemoto, Auto Tadokoro, Giro Yamamoto
Department of Orthopedic Surgery, Kochi Health Sciences Center, Japan

O09-5 Minimally invasive spine surgery in the treatment of thoracolumbar and lumbar spine injuries
Yasuo Ito
Department of Orthopaedic Surgery, Kobe Red Cross Hospital, Japan
**O09-6 Management of surgical site infection (SSI) after spine surgery - current strategies and outcomes**

Kazunari Fushimi\textsuperscript{1)}, Chizuo Iwai\textsuperscript{1)}, Tetsuya Shimokawa\textsuperscript{1)}, Kei Miyamoto\textsuperscript{2)}, Akira Hioki\textsuperscript{3)}, Katsuji Shimizu\textsuperscript{2)}, Hideo Hosoe\textsuperscript{4)}, Haruhiko Akiyama\textsuperscript{1)}

\textsuperscript{1)}Department of Orthopaedic Surgery, Gifu University Graduate School of Medicine, Japan
\textsuperscript{2)}Department of Orthopaedic Surgery, Spine Centre, Gifu Municipal Hospital, Japan
\textsuperscript{3)}Department of Orthopaedic Surgery, Spine Centre, Matsunami General Hospital, Japan
\textsuperscript{4)}Department of Orthopaedic Surgery, Spine Centre, Gifu Prefectural General Medical Centre, Japan

**Oral 10 : Knee 1**

**Chairs : Nobuo Matsui**(Nagoya City Rehabilitation Agency, Japan)  
**Jeung-Tak Suh**(Pusan National University Hospital, Korea)

**O10-1 Short-term Comparison of Total Knee Arthroplasty between Cruciate Retaining Fixed Bearing Type and Cruciate Substituting Mobile Bearing type**

Kou Hidani\textsuperscript{1)}, Tomohiro Matsushita\textsuperscript{2)}, Tadashi Minamoto\textsuperscript{2)}, Kentaro Yamane\textsuperscript{2)}, Nobuo Kai\textsuperscript{2)}

\textsuperscript{1)}Department of Orthopedic Surgery, Numakuma Hospital, Japan
\textsuperscript{2)}Department of Orthopedic Surgery, Fukuyama Medical Center, Japan

**O10-2 Comparative Study of Extramedullary guides versus Portable, Accelerometer-based Navigation in Total Knee Arthroplasty**

Kazu Matsumoto\textsuperscript{1)}, Hiroyasu Ogawa\textsuperscript{1)}, Masashi Fukuta\textsuperscript{2)}, Nobuyuki Mori\textsuperscript{2)}, Haruhiko Akiyama\textsuperscript{1)}

\textsuperscript{1)}Department of Orthopaedic Surgery, Gifu University Graduate School of Medicine, Japan
\textsuperscript{2)}Department of Orthopaedic Surgery, Matsunami General Hospital, Japan
O10-3  Minimal invasive total knee arthroplasty with or without navigation system: a prospective study with a minimum of 5 years follow-up
  
  Juhyun Nam, Kang-II Kim, Dong-Kyoon Kim, Sung-Hee Park, Jeong-Sook Lee
  
  Department of Orthopaedic Surgery, Center for Joint Diseases and Rheumatism, Kyung Hee University Hospital at Gangdong, Korea

O10-4  Navigation Assisted Total Knee Arthroplasty 8~10 Years Follow-up Results

  Seung Joon Rhee, Sung Min Hong, Jeung Tak Suh
  
  Department of Orthopaedic Surgery, Pusan National University School of Medicine, Korea

O10-5  Does Microplasty® improve radiologic alignment of the Oxford Medial Unicompartmental Knee Arthroplasty?

  Sanggyun Kim¹, Ki-Mo Jang², Hong-Chul Lim³, Seung-Beom Han², Chandong Jeong¹, Seung-Yup Lee³, Ji-Hoon Bae¹
  
  ¹Department of Orthopaedic Surgery, Korea University College of Medicine, Guro Hospital, Korea
  ²Department of Orthopaedic Surgery, Korea University College of Medicine, Anam Hospital, Korea
  ³Department of Orthopaedic Surgery, Seoul Barunsesang Hospital, Korea

O10-6  Long-Term Clinical Outcomes and Survivorship of Revision Total Knee Arthroplasty with Use of a Constrained Condylar Knee Prosthesis

  Young-Hoo Kim¹, Jang-Won Park², Jun-Shik Kim³, Hyun-Keun Oh²
  
  ¹The Joint Replacement Center, Ewha Womans University School of Medicine, SeoNam Hospital, Korea
  ²The Joint Replacement Center, Ewha Womans University School of Medicine, MokDong Hospital, Korea
Oral 11 : Knee 2

Chairs : Takayuki Furumatsu (Department of Orthopaedic Surgery, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan)
Kang-Il Kim (Department of Orthopedic Surgery, College of Medicine, Kyung Hee University, Korea)

O11-1 Comparison of Rotational Alignment Change between Closing-Wedge and Opening-Wedge High Tibial Osteotomy
Bo Hyun Kim, Joong Il Kim, Osung Lee, Ki-Woung Lee, Sahnghoon Lee, Hyuk Soo Han, Sang Cheol Seong, Myung Chul Lee
Department of Orthopaedic Surgery, Seoul National University College of Medicine, Korea

O11-2 The effect of wedge insertion angle on posterior tibial slope in medial opening wedge high tibial osteotomy
Hiroyasu Ogawa, Kazu Matsumoto, Haruhiko Akiyama
Department of Orthopaedic Surgery, Gifu University Graduate School of Medicine, Japan

O11-3 The cortical hinge position affects the posterior tibial slope in medial open-wedge high tibial Osteotomy
Shinichiro Takada, Yasuhiro Takahara, Kazutaka Yasui, Natsuki Hara, Yusuke Yokoyama, Hisayoshi Kato, Yoichiro Uchida
Department of Orthopaedic Surgery, Nippon Kokan Fukuyama Hospital, Japan

O11-4 Clinical and Radiological Results of Double Level Osteotomy for Varus Knee Osteoarthritis. Review of Our Experiences
Hiroshi Nakayama, Tomoya Iseki, Ryo Kanto, Kaori Kashiwa, Shinichi Yoshiya
Department of Orthopaedic Surgery, Hyogo College of Medicine, Japan

O11-5 Changes of Patellofemoral Joint in Second-Look Arthroscopy Following Medial Open-Wedge High Tibial Osteotomy
Juhyun Nam, Dong-Kyoon Kim, Kang-II Kim, Sung-Hee Park, Jeong-Sook Lee
Department of Orthopaedic Surgery, Center for Joint Diseases and Rheumatism, Kyung Hee University Hospital at Gangdong, Korea
O11-6  Comparative study on cartilage regeneration with Cartistem application vs osteotomy only group

Seung Deok Sun¹, Jae Young Park¹, Jin Ku Choi¹, Kwanwoo Kim¹,
Jung Sug Kim²

¹Sun's Orthopedic Clinic, Korea
²Department of Nursing, Yeoju Institute of Technology, Korea

14:56-15:36

Oral 12 : Knee 3

Chairs : Nobuhiro Abe (Department of Orthopaedic Surgery and Sport Medicine, Kawasaki Hospital, Kawasaki Medical School, Japan)

Kyoung Ho Yoon (Department of Orthopaedic Surgery, Kyung Hee University Hospital, Korea)

O12-1  SCAFFOLD-FREE CELL-MATRIX BEAD-TYPE AUTOLOGOUS CHONDROCYTE IMPLANTATION, CARTILIFETM FOR CARTILAGE REPAIR : EARLY CLINICAL RESULTS

Kyoung Ho Yoon¹,², Kee Youn Chung¹,², Jung Son Lee¹,²,
Jung Suk Kim¹,²

¹DEPARTMENT OF ORTHOPAEDIC SURGERY, KYUNG HEE UNIVERSITY HOSPITAL, Korea
²R&D CENTER, MODERN CELL & TISSUE TECHNOLOGIES, Korea

O12-2  The Shape of Native Anterior Cruciate Ligament; “Bow Tie” Appearance ACL

Jun Ho Kim, Joon Ho Wang, Kang Min Sohn

Department of Orthopaedic Surgery, Sungkyunkwan University School of Medicine, Samsung Medical Center, Korea

O12-3  Clinical Outcome of Anatomical Anterior Cruciate Ligament Reconstruction According to the Tunnel Location

Sahnghoon Lee, Joong Il Kim, Ki Woong Lee, Bo Hyun Kim,
Yoon Ho Kwak, Hyuk Soo Han, Sang Cheol Seong, Myung Chul Lee

Department of Orthopaedic Surgery, Seoul National University Hospital, Korea
O12-4  Location of the Tibial Tunnel Aperture Affects Extrusion of the Lateral Meniscus Following Reconstruction of the Anterior Cruciate Ligament

Yuya Kodama, Takayuki Furumatsu, Shinichi Miyazawa, Masataka Fujii, Takaaki Tanaka, Hiroto Inoue, Toshifumi Ozaki
Department of Orthopaedic Surgery, Okayama University Graduate School of Medicine, Dentistry, and Pharmaceutical Sciences, Japan

O12-5  Remnant Preserving ACL Reconstruction: Outcomes between Different Morphological Remnant Type

Sahnghoon Lee, Joong Il Kim, Bo Hyun Kim, Yoon Ho Kwak, Hyuksoo Han, Sang Cheol Seong, Myung Chul Lee
Department of Orthopaedic Surgery, Seoul National University Hospital, Korea