

PROGRAM

Room 1 (5F Large Hall)

1st day - Friday, November 2nd

Opening Remarks 8 : 00 ~ 8 : 10

President: Hiroshi Taneichi (Department of Orthopaedic Surgery, Dokkyo Medical University)

International Symposium 8 : 10 ~ 9 : 40

Moderator : Manabu Ito (Department of Orthopedic Surgery, National Hospital Organization, Hokkaido Medical Center)

Morio Matsumoto (Department of Orthopaedic Surgery, Keio University)

IS-1 Comparison of Growth-Friendly Surgery with A Rib-Based Construct in Patients with and without Congenital Scoliosis : A Five-Year Follow-up Study ▶ Page 111

○Noriaki Kawakami, et al.

Department of Orthopedic Surgery and Spinal Center, Meijo Hospital

IS-2 What Is the Best Distraction Frequency for Magnetically Controlled Growing Rods? – Insight from A Multi-Center Prospective Study ▶ Page 112

○Cheung Jason Pui Yin, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

IS-3 Congenital Scoliosis – Current Treatment Options ▶ Page 113

○Michael G. Ruf

Center for Spine Surgery, Orthopedics and Traumatology, SRH-Klinikum Karlsbad-Langensteinbach

IS-4 Neuromuscular Scoliosis: Treatment, Complications and Outcomes ▶ Page 114

○Shah Suken A.

Department of Orthopaedics, Nemours/Alfred I. duPont Hospital for Children, Wilmington, Delaware, USA

IS-5 Effect of Direct Vertebral Rotation in Single Thoracic Adolescent Idiopathic Scoliosis ▶ Page 115

○Jin-Hyok Kim et al.

Department of Orthopedic Surgery, CM General Hospital,
Department of Orthopedic Surgery, Sanggye Paik Hospital, Inje University,
Department of Orthopedic Surgery, Guro Hospital, Korea University,
Department of Orthopedic Surgery, Kyung Hee University Hospital, Kyung Hee University

- IS-6 Spinopelvic Sagittal Parameters and ODI Subscale Score Patterns after Decompressive Laminectomy for Lumbar Spinal Stenosis: A Preliminary Study** ▶ Page 116
○Chang-Hoon Jeon et al.
Department of Orthopaedic Surgery, Ajou University
- IS-7 Ethnic Characteristics of Adult Spinal Deformity (ASD) Patients: A Comparison of Propensity Score Matched North American and Japanese ASD Patients** ▶ Page 117
○Naobumi Hosogane et al.
Orthopedic Surgery, Kyorin University
- IS-8 Anterior Column Realignment for the Management of Sagittal Plane Adult Spinal Deformity** ▶ 118 ページ
○Robert Eastlack
Orthopaedic Surgeon
Scripps Clinic, Division of Orthopaedic Surgery
University of California, San Diego and VA Hospital

Oral 1 AIS Surgery 1

9 : 45 ~ 10 : 21

Moderator : Taichi Tsuji (Department of Orthopaedic Surgery, Toyota Kosei Hospital)

- O-1-A-1 New Method for Selection of Fusion Area Using Extended S-Line in Lenke Type 1A Curve in Adolescent Idiopathic Scoliosis** ▶ Page 143
○Ryo Munakata, et al.
The Department of Orthopaedic Surgery, Shinshu University Hospital
- O-1-A-2 Postoperative Changes of End Vertebrae after Posterior Spinal Instrumentation and Fusion for Lenke Type 1 Curve** ▶ Page 144
○Masayuki Ishikawa, et al.
Department of Orthopaedic Surgery, Keiyu Hospital
- O-1-A-3 A Clinical Assessment of Surgical Outcomes for the Boy Patients with AIS** ▶ Page 145
○Akito Yabu, et al.
Department of Orthopedic Surgery, Ishikiriseiki Hospital
- O-1-A-4 Bending Angle of the Concave-Side Rod Affects Thoracic Kyphosis in Adolescent Idiopathic Scoliosis Lenke 1- and 2- Curves** ▶ Page 146
○Hiroki Oba, et al.
Department of Orthopaedic Surgery, Shinshu University School of Medicine
- O-1-A-5 Impact of Multilevel Facetectomy and Rod Curvature on Anatomical Spinal Reconstruction in Thoracic Adolescent Idiopathic Scoliosis** ▶ Page 147
○Hideki Sudo, et al.
Department of Orthopaedics, Hokkaido University Hospital

O-1-A-6 'CORRECTION BOX' for Scoliosis Surgery

▶ Page 148

○Sohei Ebara, et al.

Spine and Scoliosis Center, Shonan Fujisawa Tokushukai Hospital

Oral 2 AIS Surgery 2

10 : 21 ~ 10 : 57

Moderator : Kazumasa Ueyama (Aomori Jikeikai Hospital)

O-1-B-1 Three-Dimensional Computed Tomographic Analysis of Spinal Canal Length Increase after Surgery for Adolescent Idiopathic Scoliosis. A Multicenter Study ▶ Page 149

○Shoji Seki, et al.

Dept of Orthopaedic surg, University of Toyama

O-1-B-2 Residual Thoracolumbar/Lumbar Curve is Related to Self-Image after Surgery for Lenke 1 and 2 Curves in Adolescent Idiopathic Scoliosis Patients ▶ Page 150

○Tetsuhiko Mimura, et al.

Department of Orthopaedic Surgery, Yodakubo Hospital,

Department of Orthopaedic Surgery, Shinshu University School of Medicine

O-1-B-3 Sagittal Alignment Profile in Patients with Lenke 5C Adolescent Idiopathic Scoliosis: Comparison of Selective Anterior and Posterior Instrumentation Surgery ▶ Page 151

○Ryoji Tauchi, et al.

Department of Orthopaedics and Spine Surgery, Meijo Hospital

O-1-B-4 The Assessment for Distal Junctional Angle after Corrective Surgery in Adolescent Idiopathic Scoliosis ▶ Page 152

○Tomohiro Banno, et al.

Department of Orthopaedic Surgery, Hamamatsu University School of Medicine

O-1-B-5 Corrective Posterior Sacrolumbar Interbody Fusion for Lumbar Scoliosis with An Oblique-Take Off: ▶ Page 153

○Tetsuya Ohara, et al.

Orthopaedics and Spine Surgery, Meijo Hospital

O-1-B-6 The Prevalence of Lumbosacral Transitional Vertebrae and Its Surgical Outcomes for Lenke Type5c Adolescent Idiopathic Scoliosis with Left Main Curves ▶ Page 154

○Ippei Yamauchi, et al.

Department of Orthopaedics and Spine Surgery, Meijo Hospital

Oral 3 Diagnosis and Evaluation 1**10 : 57 ~ 11 : 27**Moderator : Yasuhisa Arai (Tokyo Metropolitan Rehabilitation Hospital)

O-1-C-1 Forward Roll Performance before and after Correction and Fusion Surgeries for Adolescent Idiopathic Scoliosis ▶ Page 155

○Takahiro Iida, et al.

The First Department of Orthopaedic Surgery, Dokkyo Medical University
Saitama Medical Center**O-1-C-2 Pre Operative Sports Activity in Patients with Adolescent Idiopathic Scoliosis** ▶ Page 156

○Takehide Katogi, et al.

The Department of Physical Therapy SEIREI SAKURA CITIZEN HOSPITAL,

O-1-C-3 Change in Trunk Strength Following Posterior Surgery in Adolescent Idiopathic Scoliosis Patients ▶ Page 157

○Taro Okumura, et al.

Department of Physical Therapy Seirei Sakura Citizen Hospital

O-1-C-4 A Comparative Study between SRS-22 and SJ-27 to Evaluate Surgical Outcome in the Japanese Patients with Adolescent Idiopathic Scoliosis ▶ Page 158

○Tatsuya Endo, et al.

AIZU Medical Center, Fukushima Medical University

O-1-C-5 Reliability and Validity of A Novel Quality of Life Questionnaire for Female Patients with Adolescent Idiopathic Scoliosis: Scoliosis Japanese Questionnaire-27 ▶ Page 159

○Toru Doi, et al.

Department of Orthopaedic Surgery, Faculty of Medicine, The University of Tokyo

Members Business Meeting of JSS Annual Meeting 11 : 30 ~ 12 : 00

Luncheon Seminar 1**12 : 10 ~ 13 : 10**Moderator : Hiroshi Taneichi (Department of Orthopaedic Surgery, Dokkyo Medical University)

LS-1 Current Controversies and Challenges in Early Onset Spinal Deformity

○Suken A. Shah

Department of Orthopedics, Nemours/Alfred I. duPont Hospital for Children

Sponsored : DePuy Synthes, Johnson & Johnson K.K.

ML Basic Research and Clinical Practice of Scoliosis - Current Status and Future Perspective in Japan

- Morio Matsumoto
Department of Orthopaedic Surgery, Keio University
-

Oral 4 Diagnosis and Evaluation 2**14 : 30 ~ 15 : 06**Moderator : Satoru Demura (Department of Orthopaedic Surgery, Kanazawa University)

O-1-D-1 A Cross-Sectional Study on Sagittal Alignment and Aging in Lenke 5C, 6C Idiopathic Scoliosis Patients ▶ Page 160

- Junya Katayanagi, et al.
Dokkyo Medical University, Saitama Medical Center

O-1-D-2 Relationship between Residual Lumbar Curvature of Adult Idiopathic Scoliosis and Lumbar Intervertebral Disc Degeneration. Comparison to Healthy Control ▶ Page 161

- Satoshi Suzuki, et al.
Department of Orthopedic Surgery, Keio University School of Medicine

O-1-D-3 Accuracy of Thoracic Cage Parameters Using 3-Dimensional Rib Reconstruction Images by Simultaneous Biplanar Radiographic Scanning Technique in Adolescent Idiopathic Scoliosis ▶ Page 162

- Masaaki Machino, et al.
Department of Orthopedic Surgery, Nagoya University Graduate School of Medicine

O-1-D-4 A Comparison of I-Scolioroller and Moire Topography in School Scoliosis Screening ▶ Page 163

- Shizuo Jimbo, et al.
Department of Orthopaedic Surgery, Asahikawa Medical University

O-1-D-5 Pre-Operative Six Minute Walk Performance in Children with Congenital Scoliosis ▶ Page 164

- Noriaki Kawakami, et al.
Department of Orthopedic Surgery and Spinal Center, Meijo Hospital

O-1-D-6 Hyperamylasemia and Pancreatic Hyperamylasemia Following Spinal Surgery ▶ Page 165

- Masahiro Iinuma, et al.
Department of Orthopedic Surgery, St. Marianna University School of Medicine

Oral 5 Basic Science**15 : 06 ~ 15 : 42**Moderator : Toru Hirano (Division of Orthopedic Surgery, Niigata University)

O-1-E-1 The Effect of Metals Used in Spinal Implants on Bacteria Proliferation: in Vitro and in Vivo Evaluation ▶ Page 166

○Kota Watanabe, et al.
Department of Orthopedic Surgery, Keio University School of Medicine

O-1-E-2 Association between Pain Threshold and Accumulation of Pentosidine to the Sciatic Nerve in Ovariectomized Model in Rats ▶ Page 167

○Tomotaka Umimura, et al.
Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.

O-1-E-3 The Retinol-Retinoic Acid Metabolic Pathway is Impaired in the Lumbar Spine of A Rat Model of Congenital Kyphoscoliosis ▶ Page 168

○Hiroyuki Sonoda, et al.
Department of Orthopaedic Surgery, Graduate School of Medicine, Gunma University

O-1-E-4 A Replication Study for the Association of RS11190870 with Curve Severity in Adolescent Idiopathic Scoliosis in Japanese ▶ Page 169

○Yohei Takahashi, et al.
Department of Spine and Spinal Cord Surgery, Fujita Health University,
Department of Orthopaedic Surgery, School of Medicine, Keio University,
Laboratory of Bone and Joint Diseases, RIKEN Center for Integrative Sciences

O-1-E-5 The Disc Height Decreases with Growing Rod Technique ▶ Page 170

○Takafumi Chiba, et al.
The Department of Orthopaedics, Dokkyo Medical University

Symposium 1 Adolescent Idiopathic Scoliosis**15 : 50 ~ 17 : 20**

Moderator : Haruhisa Yanagida (Fukuoka Children's Hospital)

Kota Watanabe (Department of Orthopaedic Surgery, Keio University)

S-1-1 A Multi-Ethnic Meta-Analysis Defined the Association of RS12946942 with Curve Progression of Adolescent Idiopathic Scoliosis ▶ Page 119

○Kazuki Takeda, et al.
Department of Orthopaedic Surgery, Keio University School of Medicine,
Laboratory of Bone and Joint Diseases, Center for Integrative Medical Sciences, RIKEN

- S-1-2 Quality of Life Status in Non-Operated Patients with Adolescent Idiopathic Scoliosis in the Middle Years: Mean 25 Years Follow-Up Study** ▶ Page 120
 ○Kei Watanabe, et al.
 Department of Orthopaedic Surgery, Niigata University School of Medicine
- S-1-3 Development of Monitoring System to Evaluate the Compliance of Scoliosis Brace for AIS Patients** ▶ Page 121
 ○Kai Hirata, et al.
 Nippon Sigmax Co., Ltd
- S-1-4 Effects of the Correction of Thoracic Adolescent Idiopathic Scoliosis for the Non-Instrumented Lumbar Curve and Coronal Balance** ▶ Page 122
 ○Akira Iwata, et al.
 Department of Orthopaedic Surgery, Faculty of Medicine and Graduate School of Medicine, Hokkaido University
- S-1-5 Radiographic Evaluation of Vertebral Coplanar Alignment for Lenke Type 1 Adolescent Idiopathic Scoliosis** ▶ Page 123
 ○Hiroshi Moridaira, et al.
 Department of Orthopedic Surgery, Dokkyo Medical University School of Medicine
- S-1-6 Spontaneous Correction of L4 Tilt Following Posterior Corrective Surgery for Lenke 5C AIS Patients** ▶ Page 124
 ○Masayoshi Iwamae, et al.
 Department of Orthopaedic Surgery, Osaka City General Hospital, Osaka, Japan
- S-1-7 Low Back Pain and Spinal Alignment in Idiopathic Scoliosis Patients: A Minimum 10-Year Follow-Up after Surgery** ▶ Page 125
 ○Takuto Kurakawa, et al.
 Department of Orthopaedic Surgery, National Hospital Organization Kobe Medical Center
- S-1-8 Long-Term Trend of Surgical Medical Costs in Adolescent Idiopathic Scoliosis Surgery** ▶ Page 126
 ○Kazuyoshi Kobayashi, et al.
 Department of Orthopaedic Surgery, Nagoya University Graduate School of Medicine

Evening Seminar 1

17 : 30 ~ 18 : 30

Moderator : Takahiro Iida (Department of First Orthopedic Surgery, Dokkyo Medical University, Saitama Medical Center)

- ES-1 Osteoporosis, Vertebral Fracture and Spinal Deformity -Treatment Options and their Rationale-**
 ○Masahiro Kanayama
 Hakodate Central General Hospital

Sponsored : Eli Lilly Japan K.K.

Short Talk 1 ASD Pathology

9 : 45 ~ 10 : 12

Moderator : Yoichi Aota (Yokohama Brain and Spine Center)

- ST-1-A-1 The Trunk Kinematics During Gait of Adult Adolescent Idiopathic Scoliosis** ▶ Page 202
○Mitsuhiro Nishida, et al.
The Department of Orthopedic Surgery, Keio University,
Saiseikai Yokohama-city Nanbu Hospital
- ST-1-A-2 Extensive Corrective Fusion Surgery Improves Gait Posture in Elderly ASD Patients: A Comparison of Gait Analysis by Age Group** ▶ Page 203
○Hideyuki Arima, et al.
Department of Orthopedic Surgery, Hamamatsu University School of Medicine
- ST-1-A-3 Clinical Consideration for Three-Dimensional Gait Analysis of Adult Spinal Deformity** ▶ Page 204
○Chizuo Iwai, et al.
Department of Orthopedic Surgery, Gifu University Graduate School of Medicine
- ST-1-A-4 Sagittal Spinal Alignment Deterioration Decreases Physical Function in the General Elderly Population: A Japanese Cohort Survey** ▶ Page 205
○Ryosuke Tokida, et al.
Rehabilitation Center, Shinshu University Hospital, Nagano, Japan
- ST-1-A-5 Deterioration of Sagittal Spinal Alignment Exposes Latent Cognitive Impairment in the General Elderly Population** ▶ Page 206
○Hikaru Nishimura, et al.
Rehabilitation Center, Shinshu University Hospital
- ST-1-A-6 A Study on Correlation between Sagittal Alignment and Muscle Mass in Patients with Lumbar Spine Disease** ▶ Page 207
○Kazuhide Inage, et al.
Department of Orthopaedic surgery, Graduate school of Medicine, Chiba University

Short Talk 2 ASD LIF**10 : 12 ~ 10 : 39**

Moderator : Hiroshi Yamada (Department of Orthopaedic Surgery, Wakayama Medical University)

ST-1-B-1 Analysis for Pre and Post-Operative Change of Running Direction of Large Blood Vessels in Correction Surgery Using LLIF for ASD**▶ Page 208**

○Shinjiro Kaneko, et al.

Department of Orthopaedic Surgery, Murayama Medical Center

ST-1-B-2 Analysis for limitation of LLIF for Disc Level with Spontaneous Partial Interbody Fusion in Correction Surgery for Adult Spinal Deformity**▶ Page 209**

○Shinjiro Kaneko, et al.

Department of Orthopaedic Surgery, Murayama Medical Center

ST-1-B-3 Transition of Operative Methods in Adult Spinal Deformity Surgery Following Application of Lateral Lumbar Interbody Fusion (LLIF)**▶ Page 210**

○Yu Yamato, et al.

Department of Orthopaedic Surgery, Hamamatsu University School of Medicine

ST-1-B-4 Retrospective Evaluation of ASD Surgery Using OLIF Combined with Posterior Column Osteotomy**▶ Page 211**

○Gen Inoue, et al.

Department of Orthopaedic Surgery, Kitasato University School of Medicine

ST-1-B-5 Where is An Optimal XLIF Cage Position in Corrective Surgery for the Patient with Adult Spinal Deformity?**▶ Page 212**

○Hironari Fukuda, et al.

Department of Orthopaedic and Spine Surgery Fukushima Medical University

ST-1-B-6 The Evaluation of Degenerative Lumbar Kyphoscoliosis Patients Treated with LLIF and Posterior Corrective Fusion Based on Post-Operative PI-LL**▶ Page 213**

○Haruo Misawa, et al.

Dept. of Orthop. Surg., Okayama University Hospital

Short Talk 3 ASD Complications**10 : 39 ~ 11 : 02**

Moderator : Gen Inoue (Kitasato University)

ST-1-C-1 Does the Iliac Screw Loosening Affect to Clinical Outcomes after Adult Spinal Deformity Surgery?**▶ Page 214**

○Naruhito Fujita, et al.

Department of Orthopaedic Surgery, Keio University School of Medicine, Tokyo, Japan

- ST-1-C-2 Consideration on Complications of Operative with Anterior and Posterior Combined Surgery Using OLIF for Adult Spinal Deformity** ▶ Page 215
- Akiyoshi Kuroda, et al.
Dept. of Orthopaedic Surgery Kitasato University School of Medicine
- ST-1-C-3 Was Anterior-Posterior Spinal Fusion Associated with Higher Proximal Junctional Kyphosis Risk than Posterior Spinal Fusion in Adult Spinal Deformity Surgery?** ▶ Page 216
- Yuki Shiratani, et al.
Seirei Sakura Citizen Hospital
- ST-1-C-4 The Analysis of A Relationship between Sagittal Spino-Pelvic Profile (Maximum-Kyphosis Apex and Maximum-Lordosis Apex and the δ) and PJF** ▶ Page 217
- Masashi Okamoto, et al.
Niigata Spine Surgery Center
- ST-1-C-5 Intraoperative Neuromonitoring during Adult Spinal Deformity Surgery: Alert-Positive Cases for Various Surgical Procedures** ▶ Page 218
- Go Yoshida, et al.
Department of Orthopedic Surgery, Hamamatsu University School of Medicine

Short Talk 4 ASD Evaluation

11 : 02 ~ 11 : 25

Moderator : Koichi Sairyo (Department of Orthopedics, Tokushima University)

- ST-1-D-1 3-D High Resolution Image Analysis of Segmental Morphological Change in Degenerative Lumbar Spine** ▶ Page 219
- Hiroto Yamaguchi, et al.
Department of Orthopaedic Surgery , Juntendo Tokyo Koto Geriatric Medical Center, Juntendo University School of Medicine
- ST-1-D-2 Concerning of Measurement of Vertebral Body Rotation Angle Utilizing Spinal Front X-Ray Image -Compare to CT Image-** ▶ Page 220
- Takashi Uozaki, et al.
Shiga School of Medical Technology Department of Physical Therapy
- ST-1-D-3 The Factors Associated with the Achievement of MCID in ODI after Surgery for Adult Spinal Deformity** ▶ Page 221
- Naobumi Hosogane, et al.
Department of Orthopedic Surgery, Kyorin University,
Keio Spine Research Group

ST-1-D-4 C7-CSVL is A Prognostic Factor of Lumbar Degenerative Scoliosis Progression in High Age Volunteers: The TOEI Study ▶ Page 222

○Hiroki Ushirozako, et al.

Department of Orthopedic surgery, Hamamatsu University School of Medicine

ST-1-D-5 Report on Trunk and Lumbar Dysfunction of Adult Spinal Deformity Patients - HRQOL Subclass Analysis - ▶ Page 223

○Junya Katayanagi, et al.

Dokkyo Medical University, Saitama Medical Center

Luncheon Seminar 2

12 : 10 ~ 13 : 10

Moderator : Haruhisa Yanagida (Fukuoka Children's Hospital)

LS-2 Evolving Surgical Techniques and Advanced Research in AIS

○Daisuke Sakai

Department of Orthopaedic Surgery, Tokai University

Sponsored : Stryker Japan K.K.

Short Talk 5 ASD Surgery 1

14 : 30 ~ 14 : 53

Moderator : Hideo Hosoe (Gifu Prefectural General Medical Center)

ST-1-E-1 Factor Associated with Bony Fusion after Lateral Interbody Fusion for Adult Spinal Deformity ▶ Page 224

○Eijiro Okada, et al.

Department of Orthopaedic Surgery, Keio University

ST-1-E-2 Evaluation of CT Images Pre- and Post-XLIF Surgery in Patients with Adult Spinal Deformity ▶ Page 225

○Akihiko Hiyama, et al.

The Department of Orthopaedic Surgery, University of Tokai

ST-1-E-3 Recovery of Basic Activities of Daily Living (BADL) in An Early Stage after Surgery for Adult Spinal Deformity ▶ Page 226

○Takashi Terao, et al.

Department of Rehabilitation, National Hospital Organization Kobe Medical Center

ST-1-E-4 Changes of SRS-22 Score and Radiographic Parameters after the Correction and Fusion Surgery for Adult Patients with Idiopathic Scoliosis ▶ Page 227

○Kenshi Daimon, et al.

The Department of Orthopedic Surgery, Ogikubo Hospital
KSRG (Keio Spine Research Group)

ST-1-E-5 The Surgical Results in Adult Patients with Idiopathic Scoliosis

▶ Page 228

○Takayuki Nakajima, et al.

Department of Orthopedic Surgery, Showa University Fujigaoka Hospital

Short Talk 6 ASD Surgery 2

14 : 53 ~ 15 : 16

Moderator : Katsumi Harimaya (Department of Orthopaedic Surgery, Kyushu University, Beppu Hospital)

ST-1-F-1 The Operative Outcomes According to Presence or Absence of Thoracic Compensatory Change among the Cases with T1 Slope Over 40°

▶ Page 229

○Shin Oe, et al.

The Department of Geriatric Musculo Skeletal Health, Hamamatsu University School of Medicine

ST-1-F-2 Improvement of Drop Head Syndrome by Realignment Surgery of Thoraco-lumbar Kyphotic Deformity. A Case Report

▶ Page 230

○Masatake Ino, et al.

Department of Orthopaedic Surgery, Gunma Spine Center

ST-1-F-3 Changes in Sagittal Compensatory Condition with Adult Spinal Deformity Surgery from Preoperative to Two-Years Follow-Up

▶ Page 231

○Satoshi Inami, et al.

Dokkyo Medical University, Orthopedic Surgery

ST-1-F-4 Novel Radiographic Strategy for Predict the Thoracic Reciprocal Change after Osteotomy in Patients with ASD

▶ Page 232

○Koji Ishikawa, et al.

Sanraku Hospital, Spine and Spinal Cord Center, Tokyo,
Department of Orthopaedic Surgery, Showa University School of Medicine, Tokyo

ST-1-F-5 Were There Relationship between Ankylosis in the Occipito-Cervical-Junction, Thoracic Kyphosis, and C2 High Riding VA in Patients with Ankylosing Spondylitis?

▶ Page 233

○Nodoka Manabe, et al.

Inanami Spine And Joint Hospital, East Maebashi Orthopaedic Hospital,
Uppsala University

Short Talk 7 ASD Surgery 3**15 : 16 ~ 15 : 39**

Moderator : Yuichiro Abe (Eniwa Hospital)

ST-1-G-1 Does the Morphology of Lumbar Lordosis in Postoperative Adult Spinal Deformity Patients affect Spino-Pelvic Sagittal Alignment and QOL ? ▶ Page 234

○Takuya Imura, et al.

Dokkyo Medical University Department of Orthopaedic Surgery

ST-1-G-2 Clinical Result of Kyphoscoliosis Comparison between Degenerative Kyphoscoliosis and Kyphoscoliosis with Osteoporotic Vertebral Fracture ▶ Page 235

○Tadashi Nukaga, et al.

Department of Orthopaedic Surgery, Tokai University School of Medicine

ST-1-G-3 The Cutoff Value of Lower Lumbar Lordosis for Optimal Lumbar Arc on Adult Spine Deformity Surgery ▶ Page 236

○Junya Katayanagi, et al.

Dokkyo Medical University, Saitama Medical Center

ST-1-G-4 Short Segment Fusion For Adult Spinal Deformity: Predictors for Postoperative Low Back Pain ▶ Page 237

○Hiroshi Moridaira, et al.

Department of Orthopedic Surgery, Dokkyo Medical University School of Medicine

ST-1-G-5 The Change of Coronal Plane Spinal Balance after LLIF in Patients with Severe Spinal Deformity ▶ Page 238

○Daisuke Yamabe, et al.

Dept. of Orthop. Surg., Iwate Medical Univ. School of Medicine

Evening Seminar 2**17 : 30 ~ 18 : 30**

Moderator : Manabu Ito (Department of Orthopedic Surgery, National Hospital Organization Hokkaido Medical Center)

ES-2 Safety of Spinal Deformity Surgery : Intraoperative Hemostatic Approach et al.

○Taichi Tsuji

Department of Orthopedic Surgery, Toyota Kosei Hospital

Sponsored : Baxter Limited

Room 3 (4F Room 406)

1st day - Friday, November 2nd

English Session 1 Diagnostics and Others

9 : 45 ~ 10 : 39

Moderator : Ken Ishii (Department of Orthopaedic Surgery, International University of Health and Welfare)

EN-1-A-1 Selecting Lowest Instrumented Vertebra Using Fulcrum Bending Achieved Shorter Fusion Safely Compared with “Substantially” Touching Vertebra in Lenke 1A Curves ▶ Page 297

○Wong Henry CP, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-1-A-2 Radiologically Defining Horizontal Gaze Using EOS® Imaging - A Prospective Study of Healthy Subjects and a Retrospective Audit ▶ Page 298

○Tan Kimberly-Anne, et al.

University Orthopaedics, Hand and Reconstructive Microsurgery Cluster, National University Hospital

EN-1-A-3 Validating Sagittal Parameters Obtained from 2D Images of the Whole-Body Stereoradiograph Measured by the SterEOS® Program ▶ Page 299

○Park Soo-An, et al.

Department of Orthopedic Surgery, ParkWeonWook Hospital, Busan, South Korea

EN-1-A-4 A Case Report of Marinesco-Sjogren Syndrome with Severe Scoliosis Accepted Surgical Correction ▶ Page 300

○Cen Biwen, et al.

Department of Orthopedic Surgery, Dokkyo Medical University,
Department of Spine Surgery, Taihe Hospital Affiliated Hubei College of Medicine

EN-1-A-5 Long-Term and End of Treatment Results of Magnetically Controlled Growing Rods for Early Onset Scoliosis ▶ Page 301

○Cheung Jason PY, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-1-A-6 Surgical Strategy in the Treatment of Complex Spinal Deformities ▶ Page 302

○Tzeng Shiau-Tzu, et al.

Department of Orthopedics, Taipei Tzu Chi Hospital

EN-1-A-7 Posterior Hemivertebra Resection with Short Segment Instrumented Fusion for Congenital Scoliosis ▶ Page 303

○Wu Kuan Wen, et al.

Department of Orthopaedic Surgery, National Taiwan University Hospital

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EN-1-A-8 Preoperative Halo Gravity Traction for Treatment of Severe Adult Kyphosis and Scoliosis ▶ Page 304

○Takayoshi Shimizu, et al.

Department of Orthopaedic Surgery, Kyoto University Graduate School of Medicine

EN-1-A-9 The Use of Sugammadex to Facilitate Postoperative Extubation and Reduce Hospital Stay in Neuromuscular Scoliosis Surgery ▶ Page 305

○Wu Kuan Wen, et al.

Department of Orthopaedic Surgery, National Taiwan University Hospital

Short Talk 8 Neuromuscular Scoliosis, etc 10 : 39 ~ 11 : 14

Moderator : Teppei Suzuki (Department of Orthopaedic Surgery, National Hospital Organization, Kobe Medical Center)

ST-1-H-1 An Adult Case of Rapid Progression of Scoliosis after Encephalitis ▶ Page 239

○Takuya Nagai, et al.

Department of Orthopaedic surgery, University of Miyazaki

ST-1-H-2 The Surgical Outcome of Syndromic Scoliosis with Muscular Dystrophy ▶ Page 240

○Kenichiro Kakutani, et al.

Department of Orthopaedic Surgery, Kobe University Graduate School of Medicine

ST-1-H-3 Study of Postoperative Result in Severe Scoliosis. ▶ Page 241

○Yo Shiba, et al.

Department of Orthopaedic Surgery Dokkyo Medical University

ST-1-H-4 Spondylocostal Dysostosis ▶ Page 242

○Tomoyuki Takigawa, et al.

Department of Orthopaedic Surgery, Okayama University Hospital

ST-1-H-5 Fragility of Intervertebral Disc in Marfan Syndrome ▶ Page 243

○Yuki Taniguchi, et al.

Department of Orthopaedic Surgery, the University of Tokyo Hospital

ST-1-H-6 A Case of Bronchial Obstruction Due to Scoliosis Treated with Thoracoscopic Anterior Release and Posterior Fusion ▶ Page 244

○Kosuke Sako, et al.

Department of Orthopaedic Surgery, Surgical Science, Tokai University School of Medicine

ST-1-H-7 Surgical Treatment for Scoliosis in Patients with Congenital Heart Disease and Pulmonary Hypertension ▶ Page 245

○Yoshitaka Suzuki, et al.

Department of Orthopedics and Spine surgery, Nagoya Daini Hospital

ST-1-H-8 Cervical Spondylotic Myelopathy (CSM) in Congenital Insensitivity to Pain with Anhidrosis (CIPA) -Report of a Case- ▶ Page 246

○Kunihiko Miyazaki, et al.

Department of Orthopaedic Surgery, National Hospital Organization Kobe Medical Center

ST-1-H-9 Characteristic Reconstitution of the Spinal Langerhans Cell Histiocytosis in Young Children ▶ Page 247

○Naoyuki Nakamura, et al.

The Department of Pediatric Orthopedic Surgery, Kanagawa Children's Medical Center

English Session 2 Adult Spinal Deformity

14 : 30 ~ 15 : 12

Moderator : Tomoaki Toyone (Department of Orthopaedic Surgery, Showa University)

EN-1-B-1 An Algorithm for the Choice of Minimally Invasive Posterior Spine Surgical Treatment of Adult Spinal Deformity ▶ Page 306

○Masaaki Chazono, et al.

Department of Orthopaedic Surgery, Utsunomiya National Hospital,
Department of Orthopaedic Surgery, The Jikei Medical University

EN-1-B-2 Risk Factors of Pelvic Incidence Change in Different Weight-Loading Positions ▶ Page 307

○Park Soo-An, et al.

Department of Orthopedic Surgery, ParkWeonWook Hospital, Busan, South Korea

EN-1-B-3 Whole Body Sagittal Alignment During Directed Versus Natural Standing Postures - An Introduction to the Concepts of Ligamentous-Muscular Counterbalancing ▶ Page 308

○Hey Hwee Weng Dennis, et al.

University Orthopaedics, Hand and Reconstructive Microsurgery Cluster,
National University Hospital

EN-1-B-4 Pelvic Retroversion Influences on SAI Screw Trajectory: CT Based Anatomical Study ▶ Page 309

○Choi Unyong, et al.

Department of Neurosurgery, Gangnam Severance Hospital, Spine and Spinal Cord Institute, Yonsei University College of Medicine

EN-1-B-5 Application of Posterior Vertebral Column Resection to Reconstruction of Vertebral Body Defect Caused by Lumbar Spine Fracture ▶ Page 310

○Chih-Wei Chen, et al.

Department of Orthopaedic Surgery, National Taiwan University Hospital Hsin-Chu Branch

EN-1-B-6 A Comparison of Multiple Rods Constructs to Two Rods Constructs after Adult Deformity Surgery: Does it Prevent or Aggravate Complication? ▶ Page 311

○Choi Unyong, et al.

Department of Neurosurgery, Gangnam Severance Hospital, Spine and Spinal Cord Institute, Yonsei University College of Medicine

EN-1-B-7 Life Style Influences the Postoperative Outcomes after Corrective Surgery in Adult Spinal Deformity: A Comparison of Rural- and Urban-Dwelling Environment ▶ Page 312

○Jiin Kang, et al.

Department of Neurosurgery, Gangnam Severance Hospital, Spine and Spinal Cord Institute, Yonsei University College of Medicine, Seoul, South Korea

Short Talk 9 AIS Pulmonary Function 15 : 12 ~ 15 : 39

Moderator: Toshiaki Kotani (Department of Orthopedic Surgery, Seirei Sakura Citizen Hospital)

ST-1-I-1 Thoracic Deformity Correction and Pulmonary Function after Thoracoplasty in the Surgical Treatment of Adolescent Idiopathic Scoliosis: Minimum 5-Year Follow-Up ▶ Page 248

○Tutomu Akazawa, et al.

Department of Orthopaedic Surgery, St. Marianna University School of Medicine,
Department of Orthopedic Surgery, Seirei Sakura Citizen Hospital

ST-1-I-2 Analysis of Pulmonary Complications for Extrapleural Approach in Thoracolumbar Scoliosis Surgery ▶ Page 249

○Toshiaki Kotani, et al.

Dept. of Orthopedic Surgery, Seirei Sakura Citizen Hospital

ST-1-I-3 Factors Associated with Postoperative Lung Volume Reduction in Patient with Adolescent Idiopathic Scoliosis ▶ Page 250

○Nobuyuki Fujita, et al.

Department of Orthopaedic Surgery, Keio University School of Medicine

ST-1-I-4 Pleural Effusion after Surgery for Adolescent Idiopathic Scoliosis Affects the Improvement of Forced Expiratory Volume in 1 Second after Surgery ▶ Page 251

○Masahiro Ozaki, et al.

The Department of Orthopaedics Surgery, Keio University School of Medicine, Keiyu Spine Center, Keiyu Orthopedics Hospital

ST-1-I-5 Comparison of Pulmonary Function after Selective Anterior Versus Posterior Fusion for the Correction of Thoracolumbar and Lumbar Adolescent Idiopathic Scoliosis ▶ Page 252

○Satoru Demura, et al.

Department of Orthopaedic Surgery, Kanazawa University

ST-1-I-6 The Change of Lung Volume and Pulmonary Function after Adolescent Idiopathic Scoliosis Surgery : A 3-Dimensional Computed Tomography Based Study ▶ Page 253

○Tatsuki Mizouchi, et al.

Department of Orthopaedic Surgery, Niigata University

Evening Seminar 3

17 : 30 ~ 18 : 30

Moderator : Takanori Saito (Department of Orthopaedic Surgery,
Kansai Medical University)

ES-3 Pathologic Analysis of Adult Spinal Deformity: Kinematic Approach

○Satoshi Inami

Department of Orthopedic Surgery, Dokkyo Medical University

Sponsored : Robert Reid Inc.

Hands-on Seminar (4F Boardroom N)

1st day - Friday, November 2nd

Hands-On Seminar 1

14 : 50 ~ 15 : 50

Moderator : Haruhisa Yanagida (Fukuoka Children's Hospital)

HS-1 Correction Technique for Adolescent Idiopathic Scoliosis by Multi-Axial Translation with Shinshu-Line

○Jun Takahashi

Department of Orthopedic Surgery, Shinshu University

Sponsored : Japan Medicalnext Co., Ltd.

Room 1 (5F Large Hall)

2nd day - Saturday, November 3rd

Moring Seminar 1

8 : 10 ~ 9 : 10

Moderator : Masashi Takaso (Department of Orthopaedic Surgery, Kitasato University)

MS1 **Treatments of Adolescent Idiopathic Scoliosis, Past, Present, and Future.**

○Kota Watanabe

Department of Orthopedic Surgery, Keio University

Sponsored : Medtronic Sofamor Danek, Co., Ltd.

Symposium 2 **Complicated Scoliosis (EOS, Congenital, and Neuromuscular)**

9 : 20 ~ 10 : 50

Moderator : Koki Uno (National Hospital Organization, Kobe Medial Center)

Noriaki Kawakami (Department of Orthopedic Surgery and Spinal Center ,Meijo Hospital)

S-2-1 **Investigation for the Novel Genes of Congenital Scoliosis** ▶ Page 127

○Kazuki Takeda, et al.

Department of Orthopaedic Surgery, Keio University School of Medicine

S-2-2 **Analysis of Chest and Diaphragm Motion in Early Onset Scoliosis with Thoracic Insufficiency Syndrome Using Dynamic MRI** ▶ Page 128

○Toshiaki Kotani, et al.

Dept. of Orthopedic Surgery, Seirei Sakura Citizen Hospital

S-2-3 **Natural History of Scoliosis with Neural Axis Abnormalities (NAA)** ▶ Page 129

○Masatoshi Inoue, et al.

Department of Spine Surgery, Chiba Saisei-kai Narashino Hospital

S-2-4 **Surgical Treatment Strategy and Results for Neuromuscular Scoliosis** ▶ Page 130

○Yousuke Shibao, et al.

Dokkyo medical university, Department of Orthopaedic Surgery,
University of tsukuba, Department of Orthopaedic Surgery, Graduate
School of Comprehensive Human Science

S-2-5 **Long-Time Follow-Up Study of Foramen Magnum Decompression for Scoliosis with Chiari I Malformation** ▶ Page 131

○Toshiki Saito, et al.

Dept. of Orthopaedics&Spine Surgery, Meijo Hospital

November 2nd
Hands-on

November 3rd
Room 1

- S-2-6 Surgical Result of Growing Rods for Patients with Congenital Heart Disease** ▶ Page 132
 ○Toru Yamaguchi, et al.
 Fukuoka Children's Hospital
- S-2-7 Comparison of Radiographic Outcomes between Growing Rod and Shilla Graduates by A Single Surgeon** ▶ Page 133
 ○Teppei Suzuki, et al.
 Dept. of Orthop. Surg., Kobe Medical Center
- S-2-8 Bone Union in Immature Patients with Non-Idiopathic Scoliosis Who Underwent Spinal Fusion with Allogeneic Bone Graft** ▶ Page 134
 ○Shunsuke Kanbara, et al.
 Department of Orthopaedic surgery, Nagoya University

Oral 6 ASD Complications 10 : 55 ~ 11 : 31

Moderator : Kazuhiro Hasegawa (Niigata Spine Surgery Center)

- O-2-F-1 Predictive Model for Major Complications 2 Years after Corrective Spine Surgery for Adult Spinal Deformity** ▶ Page 171
 ○Mitsuru Yagi, et al.
 Department of Orthopedic Surgery, Keio University School of Medicine,
 Keio Spine Research Group,
 Department of Orthopedic Surgery, Kyorin University School of Medicine,
 Department of Orthopedic Surgery, NHO Murayama Medical Center
- O-2-F-2 Perioperative Complications of Posterior Three-Column Osteotomy for Adult Spinal Deformity** ▶ Page 172
 ○Sho Kobayashi, et al.
 Hamamatsu Medical Center,
 Department of Orthopaedic Surgery, University of California San Francisco
- O-2-F-3 PJK and Rod Fracture Following Adult Spinal Deformity Surgery: Comparison between PLIF and LIF** ▶ Page 173
 ○Hiroaki Nakashima, et al.
 Department of Orthopaedic Surgery, Konan Kosei Hospital
- O-2-F-4 Postoperative Reciprocal Changes in Global Spinal Alignment after Occipitospinal Fusion and Risk Factors of Horizontal Gaze Difficulty** ▶ Page 174
 ○Shuichi Kaneyama, et al.
 Department of Orthopaedic Surgery, Kobe Rosai Hospital

O-2-F-5 Assessment of Rod Fracture after Long Construct Fusion with LLIF for Adult Spinal Deformity ▶ Page 175

○Daichi Kinno, et al.
Department of Orthopedic Surgery, Iwate Medical University

O-2-F-6 Rod Breakage after PSO for Adult Spinal Deformity ▶ Page 176

○Yusuke Nakao, et al.
Dept. of Orthopedic surgery, Sanraku Hospital

Oral 7 ASD Junctional Problems **11 : 31 ~ 12 : 07**

Moderator : Satoshi Inami (Department of Orthopedic Surgery, Dokkyo Medical University)

O-2-G-1 Risk Factors and Incidence of Proximal Junctional Kyphosis in Adult Spinal Deformity Surgery ▶ Page 177

○Tsuyoshi Sakuma, et al.
Dept. of Orthopaedic Surgery, Seirei Sakura Citizen Hospital

O-2-G-2 The Relationship between Postoperative Sagittal Alignment and Proximal Junctional Failure in Patients with Adult Spinal Deformity ▶ Page 178

○Takuto Kurakawa, et al.
Department of Orthopaedic Surgery, National Hospital Organization Kobe Medical Center

O-2-G-3 Correlation between Postoperative Distribution of Lordosis and Reciprocal Progression of TK and Occurrence of PJK Following Surgery for ASD ▶ Page 179

○Tetsuro Ohba, et al.
University of Yamanashi

O-2-G-4 The Larger Thoracic Kyphosis and the More Unstable Standing Balance, Proximal Junctional Failure Following Correction Surgery Tends to Occur ▶ Page 180

○Shun Hatsushikano, et al.
Niigata Spine Surgery Center

O-2-G-5 The Effect of Posterior Tethers on the Biomechanics of Proximal Junctional Failure: The Whole Human Finite Element Model Analysis ▶ Page 181

○Mitsuru Yagi, et al.
Department of Orthopedic Surgery, Keio University School of Medicine

O-2-G-6 Risk Factors for Loosening of S2 Alar Iliac Screw: Surgical Outcomes of Adult Spinal Deformity ▶ Page 182

○Yasushi Ijima, et al.
Department of Orthopaedics Surgery, Seirei Sakura Citizen Hosp.

Luncheon Seminar 3**12 : 20 ~ 13 : 20**Moderator : Morio Matsumoto (Department of Orthopaedic Surgery, Keio University)

LS-3 Anterior Surgery for Adolescent Idiopathic Scoliosis

○Michael G. Ruf

Center for Spine Surgery, Orthopedics and Traumatology, SRH-Klinikum
Karlsbad-Langensteinbach**Sponsored : Surgical Spine, Inc.**

Oral 8 ASD Pathology 1**13 : 30 ~ 14 : 12**Moderator : Motoki Iwasaki (Osaka Rosai Hospital)

O-2-H-1 Characteristics of Gastric Esophageal Reflux Symptoms Related to Spinal Sagittal Malalignment in Elderly Patients ▶ Page 183

○Yutaka Nakamura, et al.

Saitama Spine Center, Higashi-Saitama General Hospital

O-2-H-2 Treatment of Frailty Does Not Improve the Complications in the Surgical Treatment for Adult Spinal Deformity ▶ Page 184

○Mitsuru Yagi, et al.

Department of Orthopedic Surgery, Keio University School of Medicine,
Keio Spine Research Group,
Department of Orthopedic Surgery, Kyorin University School of Medicine,
Department of Orthopedic Surgery, NHO Murayama Medical Center**O-2-H-3 Assessment of Locomotive Syndrome in Patients with Adult Spinal Deformity** ▶ Page 185

○Norihiro Oku, et al.

Department of Orthopaedic Surgery, Graduate School of Medical Sciences,
Kanazawa University**O-2-H-4 Evaluation of the Factors Affecting Pain in Adult Spinal Deformity** ▶ Page 186

○Makoto Yazawa, et al.

Department of Rehabilitation, Dokkyo Medical University Saitama Medical
Center, Koshigaya, Japan**O-2-H-5 The Relationship of Spinal Alignment and Muscle Strength Factors to Musculoskeletal Ambulation Disability Symptom Complex (MADS) in Patients with ASD** ▶ Page 187

○Takashi Tobinaga, et al.

The Department of Rehabilitation, Dokkyo Medical University Saitama
Medical Center

O-2-H-6 The Effect of Total Hip Arthroplasty on the Back Pain and Lumbar Spine Function of the Scoliosis Patient ▶ Page 188

○Eiki Shirasawa, et al.

Department of Orthopaedic Surgery, Kitasato University School of Medicine

O-2-H-7 Can Spino-Pelvic Alignment Be Improved after Hip Arthroplasty? : Focus on the Value of PT-L1 Slope to Examine the Spino-Pelvic Harmony ▶ Page 189

○Nodoka Manabe, et al.

Inanami Spine And Joint Hospital, East Maebashi Orthopaedic Hospital

Oral 9 ASD Pathology 2 14 : 12 ~ 14 : 48

Moderator : Norio Kawahara (Department of Orthopedics, Kanazawa Medical University)

O-2-I-1 Characteristic of the Kyphotic Flexibility in Adult Spinal Deformity ▶ Page 190

○Hiromichi Aoki, et al.

Department of Orthopaedic Surgery, Dokkyo Medical University School of Medicine

O-2-I-2 Factors Related to the Improvement of the HRQOL after Surgical Treatment of Adult Spinal Deformity ▶ Page 191

○Akira Matsumura, et al.

Department of Orthopaedic Surgery, Osaka City General Hospital

O-2-I-3 Relationship between Spinopelvic Decompensation and Locomotive Syndrome ▶ Page 192

○Yutaka Nakamura, et al.

Saitama Spine Center, Higashi-Saitama General Hospital

O-2-I-4 Predictive Factors of Coronal Oblique Take Off in Intraoperative X-Ray Following Adult Scoliosis Surgery ▶ Page 193

○Keiichi Nakai, et al.

Department of Orthopaedic Surgery, Narita Memorial Hospital

O-2-I-5 Change of Whole Body Sagittal Alignment after Adult spinal Deformity Surgery ▶ Page 194

○Jun Ouchida, et al.

Orthopedic Surgery, Konan Kosei Hosp.

O-2-I-6 Surgical Outcome of Corrective Long Fusion with Lateral Interbody Fusion for Adult Spinal Deformity -Prospective Study Evaluated with JOABPEQ- ▶ Page 195

○Yuichiro Abe, et al.

Dept. of Orthopedic surgery, Iwate Medical University

Oral 10 Brace Treatment**14 : 48 ~ 15 : 24**

Moderator : Ken Yamazaki (Iwate Spine and Scoliosis Center)

O-2-J-1 Initial Correction Using Boston Brace for Adolescent Idiopathic Scoliosis ▶ Page 196

○Tomonori Itsuji, et al.

Department of Orthopaedics, Graduate School of Medical Science, Kyoto Prefectural University of Medicine.

O-2-J-2 Clinical Result of Brace Treatment for Adolescent Idiopathic Scoliosis ▶ Page 197

○Hideki Shigematsu, et al.

Department of Orthopaedic Surgery, Nara Medical University

O-2-J-3 School Screening with Scoliometer in Prefecture of Toyama ▶ Page 198

○Katsuhiko Kamei, et al.

Orthopaedic Surgery, University of Toyama

O-2-J-4 Should We Take X-ray Under Brace Wearing During Brace Treatment for Adolescent Idiopathic Scoliosis Patients? ▶ Page 199

○Sachiko Kawasaki, et al.

Department of Orthopaedic Surgery, Nara Medical University

O-2-J-5 Reliability of Temperature Data Logger for Compliance of Scoliotic Orthosis. -Analysis by Wearing Braces by Nurse- ▶ Page 200

○Hiromi Kimura, et al.

Department of Nursing, Seirei Sakura Citizen Hospital

O-2-J-6 The Reason Why Pointed Out Adolescent Idiopathic Scoliosis ▶ Page 201

○Yusuke Yamamoto, et al.

Department of Orthopaedic Surgery, Nara Medical University

Symposium 3 Adult Spinal Deformity**15 : 30 ~ 17 : 00**

Moderator : Takachika Shimizu (Gunma Spine Center (Harunaso Hospital))

Yukihiro Matsuyama (Department of Orthopaedic Surgery,
Hamamatsu University)

S-3-1 Gait Analysis of Adult Spinal Deformity Patients by Three-Dimensional Inertial Sensors ▶ Page 135

○Futoshi Asano, et al.

The Department of Orthopedic Surgery, Dokkyo Medical University

- S-3-2 Influence of the Change in Muscle Mass and Back Extensor Strength On Sagittal Spino-Pelvic Deformity in Postmenopausal Women** ▶ Page 136
- Michio Hongo, et al.
Department of Orthopedic Surgery, Akita University Graduate School of Medicine
- S-3-3 Relationship between Cranio-Pelvic Imbalance and Lower Extremity Compensation in Adult Spinal Deformity** ▶ Page 137
- Takayoshi Shimizu, et al.
Department of Orthopaedic Surgery, Kyoto University Graduate School of Medicine
- S-3-4 Pelvic Incidence Measured with Computed Tomography and Radiography: A Comparative Study** ▶ Page 138
- Tadao Morino, et al.
Spine Center, Ehime University Hospital
- S-3-5 Efficacy of Nordic Walking for Adult Spinal Deformity** ▶ Page 139
- Yujiro Hirao, et al.
Department of Orthopedic Surgery, Tokyo Metropolitan Hiroo Hospital
- S-3-6 Extensive Corrective Fusion Surgery for Severe Spinal Deformity in Patients with Parkinson's Disease or Parkinson's Syndrome** ▶ Page 140
- Yu Yamato, Tomohiko, et al.
Department of Orthopaedic Surgery, Hamamatsu University School of Medicine
- S-3-7 Clinical Results of PSO for Adult Spinal Deformity-Minimum 5 Year Follow-Up-** ▶ Page 141
- Yusuke Nakao, et al.
Orthopedic Department, Sanraku Hospital, Tokyo
- S-3-8 Surgical Complications and Revision Rate in Middle Age to Elderly Adult Spinal Deformity Surgery :Minimum 5 Years Follow-Up** ▶ Page 142
- Mitsuru Yagi, et al.
Department of Orthopedic Surgery, Keio University School of Medicine,
Keio Spine Research Group,
NHO Murayama Medical Center, Department of Orthopedic Surgery

Closing Ceremony

17 : 00 ~ 17 : 20

Outstanding English Paper Award Ceremony

Room 2 (4F Room 402 N)

2nd day - Saturday, November 3rd

Moring Seminar 2

8 : 10 ~ 9 : 10

Moderator : Katsushi Takeshita (Department of Orthopaedics, Jichi Medical University)

MS-2 Mechanism and Treatment of Osteoporotic Vertebral Fracture and Spinal Deformity

○Hiroataka Haro

Department of Orthopaedic Surgery, University of Yamanashi

Sponsored : Asahi Kasei Pharma Corporation

Short Talk 10 AIS School Screening

10 : 55 ~ 11 : 18

Moderator : Ikuho Yonezawa (Spine Center, Hamadayama Hospital)

ST-2-J-1 Effective Use of School Screening and Moire Method for Early Detection of Scoliosis

▶ Page 254

○Akiko Misawa, et al.

Department of Orthopaedic Surgery, Akita Prefectural Center on Development and Disability

ST-2-J-2 Survey of Scoliosis Screening before and after the Introduction of Musculoskeletal Screening

▶ Page 255

○Yoichiro Takata, et al.

The Department of Orthopedic Surgery, Tokushima University

ST-2-J-3 Comparison of the Intra- and Inter-Rater Reliability of Moire Topography between Expert and Inexperienced Doctors

▶ Page 256

○Daisuke Kudo, et al.

Department of Orthopedic Surgery, Akita University Graduate School of Medicine

ST-2-J-4 Changes in Scoliosis Treatment after Starting Musculoskeletal Medical Checkups in 2016

▶ Page 257

○Ken Yamazaki, et al.

Iwate Spine & Scoliosis Center

ST-2-J-5 Analysis of On-Line Scoliosis Related Information for Preoperative Patients and Guardians

▶ Page 258

○Mina Kasahara, et al.

Seirei Sakura Citizen Hospital Nursing Unit

Short Talk 11 AIS Evaluation 1**11 : 18 ~ 11 : 45**Moderator : Kenta Fujiwara (Department of Orthopedic Surgery, Osaka Medical College)

ST-2-K-1 Segmental Flexibility in Adolescent Idiopathic Scoliosis Assessed by Fulcrum-bending Radiograph ▶ Page 259

○ Sachiko Kawasaki, et al.

The Department of Orthopaedic Surgery, Nara Medical University

ST-2-K-2 Significance of Preoperative Stress Radiographs for Idiopathic Scoliosis - Comparison of Side-Bending, Traction, and Hanging Films - ▶ Page 260

○ Hiroshi Kuroki, et al.

Department of Orthopaedic Surgery, NHO Miyazaki Higashi Hospital

ST-2-K-3 Considerations for Lower Instrumented Vertebra in Lenke Type 1AR Adolescent Idiopathic Scoliosis ▶ Page 261

○ Soya Kawabata, et al.

The Department of Orthopaedic Surgery, Keiyu Hospital

ST-2-K-4 Radiological Analysis of Coronal Global Balance and Lumbar Spinal Alignment after Selective Thoracic Fusion in Lenke 1C2C Adolescent Idiopathic Scoliosis ▶ Page 262

○ Takashi Namikawa, et al.

Department of Orthopaedic Surgery, Osaka City General Hospital

ST-2-K-5 Evaluation of Multifidus Muscles Using CT before the Surgery for Adolescent Idiopathic Scoliosis ▶ Page 263

○ Meiko Gou, et al.

Department of Rehabilitation, Imazu Hospital

ST-2-K-6 Regulation of Dynamic Balance in Adolescent Idiopathic Scoliosis Patients

▶ Page 264

○ Takashi Uemura, et al.

Tokai University School of Physical Education

Short Talk 12 AIS Evaluation 2**11 : 45 ~ 12 : 08**Moderator : Shiro Imagama (Nagoya University)

ST-2-L-1 What is the Expected Corrective Outcome in Adolescent Idiopathic Scoliosis Curve Larger Than 70 Degrees? ▶ Page 265

○ Kazuya Nishizawa, et al.

The Department of Orthopaedic Science, Kusatsu General Hospital, National University Hospital in Singapore,

The Department of Orthopaedic Surgery, Shiga University of Medical Science

ST-2-L-2 Evaluation of Vertebral Rotation in Adolescent Idiopathic Scoliosis by Using Traction EOS System ▶ Page 266

○Masahiro Matsumoto, et al.

Department of Orthopaedic Surgery, Yokohama City University

ST-2-L-3 Morphology and Tissue Volume of Lumbar Intervertebral Discs between AIS Patients and Healthy Subjects by MRI 3D Image Analysis ▶ Page 267

○Marina Ogawa, et al.

Department of Orthopaedic Surgery, Tokai University School of Medicine

ST-2-L-4 Relationship between Hump and Cobb Angle in Thoracolumbar/ Lumbar Curve after Selective Thoracic Fusion in Lenke 1B/1C Adolescent Idiopathic Scoliosis ▶ Page 268

○Toshimasa Futatsugi, et al.

Department of Orthopaedic Surgery, Shinshu University School of Medicine

ST-2-L-5 Interobserver and Intraobserver Reliability of EV, NV, and SV for Adolescent Idiopathic Scoliosis by the Curve Type ▶ Page 269

○Keisuke Masuda, et al.

Dept. of Orthop. Surg., School of Medicine, Nara Medical Univ., Japan

Luncheon Seminar 4

12 : 20 ~ 13 : 20

Moderator : Tokumi Kanemura (Konan Kosei Hospital)

LS-4 Lateral Interbody Fusion Strategies for the Treatment of Adult Spinal Deformity

○Robert K. Eastlack

Division of Orthopaedic Surgery, Scripps Clinic

Sponsored : NuVasive Japan K.K.

Short Talk 13 Early Onset Scoliosis

13 : 30 ~ 14 : 06

Moderator : Ichiro Kikkawa (Department of Pediatric Orthopedics, Jichi Children's Medical Center Tochigi)

ST-2-M-1 A Case of Infantile Marfan Syndrome ▶ Page 270

○Ryo Sugawara, et al.

Department of Orthopedics, Jichi Medical University

ST-2-M-2 Treatment of Gibbus Deformity Associated with Myelomeningocele with the Use of VEPTR and Subsequent Spinal Fusion: A Case Report ▶ Page 271

○Toshiki Saito, et al.

Dept. of Orthopaedics&Spine Surgery, Meijo Hospital

ST-2-M-3 Tholacolumbar Kyphosis Treated by Posterior Fusion with Posterior Column Osteotomy in Adolescent Hurler syndrome: A Case Report

▶ Page 272

○Hiroyuki Hasebe, et al.

Department of Orthopedics, Hokkaido Medical Center

ST-2-M-4 Surgical Treatment Combined with Pre/Postoperative Halo Traction for Early Onset Severe Kyphosis with Respiratory Dysfunction

▶ Page 273

○Yujiro Takeshita, et al.

Department of Spine Surgery, Yokohama Rosai Hospital, Tokyo

ST-2-M-5 Early Onset Scoliosis Associated with Arthrogyrosis Multiplex Congenita (AMC)

▶ Page 274

○Yuta Sawada, et al.

Department of Orthopaedic Surgery, Osaka City General Hospital

ST-2-M-6 Early Onset Scoliosis in A Patient with Spondyloepimetaphyseal Dysplasia with Joint Laxity (Beighton Type) : A Case Report

▶ Page 275

○Ryoji Tauchi, et al.

Dept. of Orthopaedic and Spine surgery, Meijo Hospital

Room 3 (4F Room 406)

2nd day - Saturday, November 3rd

English Session 3 AIS 1

10 : 55 ~ 11 : 37

Moderator : Naofumi Hosogane (Kyorin University)

EN-2-C-1 Basic Study of Velocity Measurement for Cerebrospinal Fluid Using MRI in Adolescent Idiopathic Scoliosis ▶ Page 313

○Susumu Takano, et al.

Department of Radiology, Tokai University Hospital

EN-2-C-2 Curve Magnitude, Sleep, Depression and Brace Treatment are Significant Risk Factors for Developing Back Pain in Adolescent Idiopathic Scoliosis ▶ Page 314

○Cheung Jason PY, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-2-C-3 Learning Curve in Minimally Invasive Surgery of Adolescent Idiopathic Scoliosis ▶ Page 315

○Yang Jae Hyuk, et al.

Department of Orthopedic Surgery, Korea University Guro-Hospital, Seroul, Korea,

Department of Orthopaedics, Inje University, Sanggye Baek Hospital, Seoul, Korea

EN-2-C-4 Anterior Correction of the Thoracolumbar or Lumbar Adolescent Idiopathic Scoliosis (AIS) : Report on Short Fusion ▶ Page 316

○Wong Cheuk Yin Matthew, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-2-C-5 The Outcome of Surgical Treatment of Adolescent Idiopathic Scoliosis with Spinal Fusion without Rotational Correction in Surakarta, Indonesia ▶ Page 317

○Ermawan Rieva, et al.

Faculty of Medicine, Sebelas Maret University of Surakarta,

Department of Orthopaedic and Traumatology, Spine Division, Soeharso National Orthopaedic Hospital Surakarta,

Department of Orthopaedic and Traumatology, Moewardi General Hospital Surakarta

EN-2-C-6 Deformity Correction Using Proximal Hooks and Distal Screws (PHDS) Improves Radiological Metrics in Adolescent Idiopathic Scoliosis ▶ Page 318

○Gajaseni Pawin, et al.

Phramongkutklao Hospital and College of Medicine,

University of Iowa hospital and clinics

EN-2-C-7 Distal Fusion Level in the Major Thoracolumbar and Lumbar Adolescent Idiopathic Scoliosis Treated by Rod Derotation and Direct Vertebral Rotation ▶ Page 319

- Chang Dong-Gune, et al.
Department of Orthopedic Surgery, Sanggye Paik Hospital, Inje University,
Department of Orthopedic Surgery, CM General Hospital,
Department of Orthopedic Surgery, Guro Hospital, Korea University,
Department of Orthopedic Surgery, Kyung Hee University Hospital, Kyung Hee University

Short Talk 14 AIS Surgical Tips 11 : 37 ~ 12 : 09

Moderator : Takuya Yamamoto (Japanese Red Cross Kagoshima Hospital)

ST-2-N-1 Identification of Optimized Rod Shapes to Guide Anatomical Spinal Reconstruction for Adolescent Thoracic Idiopathic Scoliosis ▶ Page 276

- Terufumi Kokabu, et al.
Dept. of Orthop. Surg., Hokkaido Univ. Faculty of Medicine and Graduate School of Medicine

ST-2-N-2 Effects of Differential Rod Contouring on Thoracolumbar/Lumbar Curvature in Patients with Adolescent Idiopathic Scoliosis: An Analysis with Intraoperative CT ▶ Page 277

- Shoji Seki, et al.
Department Orthopaedic Surgery, University of Toyama

ST-2-N-3 Clinical Outcomes in AIS Correction Conducted by Double-Rod Rotation Technique Using Reduction Screw Versus Conventional Method ▶ Page 278

- Kenichiro Yahata, et al.
Sendai Nishitaga National Hospital

ST-2-N-4 Pedicle Perforation while Inserting Screws Using O-Arm During Surgery for Adolescent Idiopathic Scoliosis: Risk Factors and Effect of Insertion Order ▶ Page 279

- Hiroki Oba, et al.
Department of Orthopaedic Surgery, University of Yamanashi School of Medicine,
Department of Orthopaedic Surgery, Shinshu University School of Medicine

ST-2-N-5 An Analysis of the Difference between Preoperative Diameter of Pedicle and Inserted Diameter of Pedicle Screw ▶ Page 280

- Katsuhiko Kamei, et al.
Orthopaedic surgery, University of Toyama

ST-2-N-6 Effect of the Thoracic Kyphosis Formation and Rotational Correction by DVR after SDRRT for Idiopathic Scoliosis ▶ Page 281

- Masashi Miyazaki, et al.
Department of Orthopaedic Surgery, Faculty of Medicine, Oita University

ST-2-N-7 Device-Related Osteopenia in Postoperative Adolescent Idiopathic Scoliosis in Young Adults ▶ Page 282

○Hironori Tanabe, et al.

Department of Orthopedics & Spine Surgery, Meijo Hospital

English Session 4 AIS 2

13 : 30 ~ 14 : 06

Moderator : Daisuke Sakai (Department of Orthopedic Surgery, Tokai University)

EN-2-D-1 Predictors of Postoperative Shoulder Imbalance in Selective Thoracic Fusion for Adolescent Idiopathic Scoliosis: Impact of Fulcrum Flexibility ▶ Page 320

○Cheung Jason PY, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-2-D-2 Achieving Shoulder Balance Using Common Radiological Measures in Patients with Adolescent Idiopathic Scoliosis Undergoing Posterior Fusion Surgery ▶ Page 321

○Gajasen Pawin, et al.

Orthopedic Department, Phramongkutklao Hospital and College of Medicine,
Orthopedic department, University of Iowa hospital and clinics

EN-2-D-3 Predicting Postoperative Curve Correction in Adolescent Idiopathic Scoliosis Using Curve Flexibility and the Sagittal Profile ▶ Page 322

○Cheung Jason PY, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-2-D-4 Can We Rely on Preoperative Traction Radiograph and Intraoperative Traction to Save Levels and Achieve Better Curve Correction in AIS? ▶ Page 323

○Sudarshan Pramod, et al.

People tree hospitals, Bangalore, India,
Apollo hospitals, Chennai , India

EN-2-D-5 Are We Weaning Braces Too Early for Adolescent Idiopathic Scoliosis: The Problem with Current Bracing Guidelines ▶ Page 324

○Cheung Jason PY, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

EN-2-D-6 An Insight into the Health-Related Quality of Life of Adolescent Idiopathic Scoliosis Patients Undergoing Bracing, Observation and Previously Braced ▶ Page 325

○Cheung Jason Pui Yin, et al.

Department of Orthopaedics and Traumatology, The University of Hong Kong

ST-2-O-1 A Prospective Study of the Physical Activity at Early Period in the Patients with Idiopathic Scoliosis ▶ Page 283

○Hiroto Makino, et al.

The Department of Orthopaedic Surgery, University of Toyama

ST-2-O-2 Hidden Blood Loss in Posterior Spinal Fixation for Adolescent Idiopathic Scoliosis; A Retrospective Study ▶ Page 284

○Yuichiro Mima, et al.

Dept. of Orthopaedic Surgery, Keio University

ST-2-O-3 Change in Spinal Length and Angle of Trunk Rotation 2 Years after Posterior Spinal Fusion for Risser0 Adolescent Idiopathic Scoliosis ▶ Page 285

○Teruki Shirayama, et al.

Department of Orthopaedic Surgery, Shinshu University, School of Medicine

ST-2-O-4 Assessment of Hump after Corrective Surgery in Adolescent Idiopathic Scoliosis : Comparison between Thoracic and Thoracolumbar Curve ▶ Page 286

○Shuji Yamamoto, et al.

Department of Orthopaedic Surgery, National Hospital Organization Kobe Medical Center

ST-2-O-5 Influence of the Change in the Thoracic Kyphosis on the Lumbosacropelvic Alignment in the Adolescent Idiopathic Scoliosis ▶ Page 287

○Haruki Ueda, et al.

The Department of Orthopaedic Surgery, Dokkyo Medical University

ST-2-O-6 Analysis of Factors Leading to Pain in Preoperative and Postoperative Adolescent Idiopathic Scoliosis Patients Including Sagittal Alignment ▶ Page 288

○Tetsuhiko Mimura, et al.

Department of Orthopaedic Surgery, Yodakubo Hospital,
Department of Orthopaedic Surgery, Shinshu University School of Medicine**ST-2-O-7 Relation between Postoperative Self-Image Score of Scoliosis Research Society-22 with Residual Spinal Deformities in Idiopathic Scoliosis Patients** ▶ Page 289

○Yoshifumi Takahashi, et al.

Department of Orthopaedic Surgery, Osaka Rosai Hospital

ST-2-P-1 Postoperative Shoulder Balance in the Patients with Adolescent Idiopathic Scoliosis: Underwent Posterior Spinal Fusion with Hook of Upper Instrumented Vertebra ▶ Page 290

○Shingo Kuroya, et al.

Department of Orthopaedic Surgery St. Marianna University School of Medicine

ST-2-P-2 Postoperative Coronal Decompensation and Related Factors in Lenke Type 1B and 1C ▶ Page 291

○Takeshi Fujii, et al.

Keio University, School of Medicine

ST-2-P-3 Influence of Preoperative End Vertebra of Proximal Thoracic Curve with Adolescent Idiopathic Scoliosis with Lenke Type 2 ▶ Page 292

○Norihiro Isogai, et al.

Spine and Spinal cord Center, International University of Health and Welfare, Mita Hospital, Keio Spine Research Group

ST-2-P-4 Comparison of Compensatory Curve and Shoulder Balance after Surgery between Lenke 1, 2 and 5 ▶ Page 293

○Kanichiro Wada, et al.

Department of Orthopaedic Surgery, Hirosaki University Graduate School of Medicine

ST-2-P-5 Posterior Corrective Fusion Using Pedicle Screw Construct for Lenke Type 1 Adolescent Idiopathic Scoliosis: Technical Tips for Shoulder Balance Control ▶ Page 294

○Kei Watanabe, et al.

Department of Orthopaedic Surgery, Niigata University School of Medicine

ST-2-P-6 The Postoperative Change of Coronal Balance and Shoulder Balance in Patients with Adolescent Idiopathic Scoliosis ▶ Page 295

○Ryo Sugawara, et al.

Department of Orthopedics, Jichi Medical University

ST-2-P-7 Postoperative Axial Neck Pain (ANP) and Its Associated Radiographic Parameters Following Posterior Corrective Surgery for the AIS Patients ▶ Page 296

○Akira Mastumura, et al.

Department of Orthopaedic Surgery, Osaka City General Hospital

Hands-on Seminar (4F Boardroom N)

2nd day - Saturday, November 3rd

Hands-On Seminar 2

10 : 55 ~ 11 : 55

Moderator : Shigeto Ebata (Department of Orthopaedic Surgery, University of Yamanashi)

HS-2 Surgical Strategy for Adult Spinal Determity - Indication of PLIF, PSO, and PVD-

○Kazuyuki Otani
Kudanzaka Hospital

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