
The 24th Annual Meeting of Japan Society for the Study of Surgical Technique for Spine and Spinal Nerves (JPSTSS)

● Program ●

22 ~ 23 September 2017



22 September (Fri.)

Main Hall 1 Snow Hall A (2F)

22 Sep. (Fri.) Main Hall 1

7:30 Registration

7:55~8:00

~ Opening Remarks ~

President Akiyoshi YAMAZAKI, M.D.

8:00~9:15 (75min.)

Main Theme 1

<Challenge for adult spinal deformities>

Chairpersons Kazuhiro HASEGAWA, M.D., Naoki ASAMI, M.D.

MI-1

Results of pedicle subtraction osteotomy (PSO) for adult spinal deformity in our hospital 190

Yu MATSUKURA, M.D., et al.

(Department Orthopaedic and Spine Surgery, Saiseikai Kawaguchi General Hospital, Kawaguchi, Saitama)

MI-2

Mini-open osteotomy for adult spine deformity: How to operate? 191

Takeshi UMEBAYASHI, M.D., et al.

(Department of Spine Surgery, Shinagawa Shishokai Hospital, Shinagawa-ku, Tokyo)

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MI-6	Rod fracture in correction of adult spinal deformity 195 Kei MIYAMOTO, M.D., et al. (Orthopedic Department, Gifu Municipal Hospital, Gifu, Gifu)
MI-7	Posterior spinal fusion with multi-rod technique for high risk cases of rod fracture 196 Kento TAKEBAYASHI, M.D., et al. (Department of Spinal Surgery, Kameda Medical Center, Kamogawa, Chiba)
MI-8	A novel technique to predict the spinal reciprocal change after osteotomy in patients with adult spinal deformity 197 Koji ISHIKAWA, M.D., et al. (Department of Orthopaedic and Spine Surgery, Sanraku Hospital, Department of Orthopaedic Surgery, Showa University School of Medicine, Chiyoda-ku, Tokyo)
MI-9	Risk factor of proximal junctional kyphosis following spinal deformity surgery is the rod curvature 198 Masayuki ISHIHARA, M.D., et al. (Orthopedic Department, Kansai Medical University Center Hospital, Moriguchi, Osaka)

9:15~10:30 (75min.)

Main Theme 2

<Challenge for tumors (spine, spinal cord)>

Chairpersons Shiro IMAGAMA, M.D., Izumi KOYANAGI, M.D.

M2-1	Results of the treatment for primary malignant spine tumor 199 Toru HIRANO, M.D., et al. (Division of Orthopedic Surgery, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Niigata)
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M2-2	The treatment for primary cervical tumors 200 Kei ANDO, M.D., et al. (Orthopedic Department, Nagoya University, Nagoya, Aichi)
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M2-7	High cervical lateral approach for spinal tumors of ventral or lateral location: Technical note 205 Kentaro NAITO, M.D., et al. (Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)
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Break

10:45~11:45 (60min.)

Spine Leader's Lecture A (Postgraduate Lecture of JOA)

10:45~11:15 (30min.)

Chairperson Seiji OHTORI, M.D.

SLL-A-1 Shigeto EBATA, M.D. (Department of Orthopaedic Surgery, University of Yamanashi, Chuo, Yamanashi)

Three required points for safely performing LLIF under intraoperative CT navigation. 149
(Medtronic Japan Co., Ltd.)

11:15~11:45 (30min.)

Chairperson Tomoaki TOYONE, M.D.

SLL-A-2 Federico P. GIRARDI, M.D. (Hospital for Special Surgery, New York, USA)

**Revision surgery for adult spinal deformity:
Current concepts** 151
(Japan Medical Dynamic Marketing, INC.)

11:45~11:55

Break

11:55~12:55 (60min.)

Luncheon Seminar 1 (Postgraduate Lecture of JOA)

Chairperson Takachika SHIMIZU, M.D.

LS-1 John HUTCHINSON, M.D. (Bristol Spire Hospital, Bristol England)

**Surgical Strategy in degenerative scoliosis
-Operative Techniques in Complex Deformity Surgery-** 177
(Johnson and Johnson K.K. DePuy Synthes)

12:55~13:00

Break

13:00~13:30

General Assembly

President Akiyoshi YAMAZAKI, M.D.

Announcement of President-elect

Makoto TANIGUCHI, M.D.

(Tokyo Metropolitan Neurological Hospital)

International Symposium 1

Surgical management of adult spinal deformities

Chairpersons Shigeo SANO, M.D., Toru HIRANO, M.D.

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ISI-2	Minimally invasive approach to adult spine deformity using LLIF and PPS technique ··········· 127 Takanori SAITO, M.D. (Department of Orthopedic Surgery, Kansai Medical University, Hirakata, Osaka)
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ISI-6	The importance of restoring sagittal balance ··········· 135 Sebastien CHAROSKY, M.D. (Centre Toulousain du Rachis, Polyclinique du Parc, Toulouse, France)

15:00 ~ 15:15

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15:15~16:15 (60min.)

Spine Leader's Lecture C (Postgraduate Lecture of JOA)

15:15~15:45 (30min.)

Chairperson Hideo HOSOE, M.D.

SLL-C-1 Naohiro KAWAMURA, M.D. (Department of Spine & Orthopedic Surgery,
Japanese Red Cross Medical Center, Shibuya-ku, Tokyo)

Dynamic spinal instrumentation 157
(Century Medical, Inc.)

15:45~16:15 (30min.)

Chairperson Takashi YAMAZAKI, M.D.

SLL-C-2 Ryuichi TAKEMASA, M.D. (Department of Orthopaedic Surgery, Spine Center,
Kochi Medical School, Nankoku, Kochi)

**Transforaminal lumbar interbody fusion using a titanium fiber mesh spacer
with high elasticity and self-locking mechanism by bone ingrowth fixation** · 159
(KYOCERA Corporation)

22 September (Fri.)

Main Hall 2 201 (2F)

7:30 Registration

8:00~9:15 (75min.)

Main Theme 3-1

<Minimally invasive surgeries 1>

Chairpersons Koji SATO, M.D., Yukoh OHARA, M.D.

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(Department of Spine Surgery, Ohashi Medical Center, Toho University, Meguro-ku, Tokyo) |
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(Neurosurgery Department, Hokkaido Neurosurgical Memorial Hospital, Sapporo, Hokkaido) |
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(Keiyu Orthopedic Hospital Keiyu Spine Center, Tatebayashi, Gunma) |
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Katsuhito YOSHIOKA, M.D., et al.
(Department of Orthopaedic Surgery, Kanazawa University, Kanazawa, Ishikawa) |

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M3-1-9	Investigation of the cases in which atlantoaxial fixation was performed by Magerl's method - Reconsideration of Magerl's method - 216 Shinsuke SUZUKI, M.D., et al. (Department of Neurosurgery, Sendai Medical Center, Sendai, Miyagi)

9:15~10:30 (75min.)

Main Theme 3-2

<Minimally invasive surgeries2>

Chairpersons Yuuichi TAKANO, M.D., Masahito HARA, M.D.

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Spine Leader's Lecture B (Postgraduate Lecture of JOA)

10:45~11:15 (30min.)

Chairperson Takanori SAITO, M.D.

SLL-B-1 Eiji ABE, M.D. (Department of Orthopaedic Surgery, Akita Kousei Medical Center, Akita, Akita)

Complications in correction surgery for adult spinal deformity (ASD) and revision surgery 153
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11:15~11:45 (30min.)

Chairperson Ikuho YONEZAWA, M.D.

SLL-B-2 Kei WATANABE, M.D. (Department of Orthopedic Surgery, Niigata University School of Medicine, Niigata, Niigata)

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11:45~11:55

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11:55 ~ 12:55 (60min.)

Luncheon Seminar 2 (Postgraduate Lecture of JOA)

Chairperson Eiji ABE, M.D.

LS-2

Takao HOMMA, M.D. (Niigata Spine Surgery Center, Niigata, Niigata)

Surgical security in spine surgery 179
(ALPHATEC PACIFIC, INC.)

12:55 ~ 13:00

Break

13:40 ~ 15:00 (80min.)

Main Theme 4

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Chairpersons Takamitsu TOKIOKA, M.D., Nobuyuki SHIMOKAWA, M.D.

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Masashi WAKASUGI, M.D., et al.

(Spine Center, Department of Orthopaedic Surgery, Niigata Central Hospital,
Niigata, Niigata)

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(Hachioji Spine Clinic, Hachioji, Tokyo)

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Masato TANAKA, M.D., et al.

(Orthopedic Department, Okayama Rosai Hospital, Okayama, Okayama)

M4-4

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Satoshi BABA, M.D., et al.

(Department of Spinal Surgery, JCHO Tokyo Shinjuku Medical Center,
Shinjuku-ku, Tokyo)

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(Department of Neurosurgery, Tsukazaki Hospital, Himeji, Hyogo)

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15:00~15:15

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15:15~16:45 (90min.)

International Lecture (Postgraduate Lecture of JOA)

15:15~15:45 (30min.)

Chairperson Akiyoshi YAMAZAKI, M.D.

IL-1 Peter VAJKOCZY, M.D. (Department of Neurosurgery,
Charite Universitätsmedizin Berlin, Berlin, Germany)

Pathophysiology and surgical treatment of cervical spondylotic myelopathy · 169

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Chairperson Yoichi AOTA, M.D.

IL-2 Martin GEHRCHEN, M.D., Ph.D (Spine Unit, Department of Orthopaedic Surgery,
Rigshospitalet & University of Copenhagen,
Copenhagen, Denmark)

Adult deformity -What can be done and what to do? 171

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Chairperson Hideki OHTA, M.D.

IL-3 Sebastien CHAROSKY, M.D. (Centre Toulousain du Rachis, Polyclinique du Parc,
Toulouse, France)

**Proximal junctional kyphosis :
Are we asking the right questions?** 173

22 September (Fri.)

Main Hall 3 301 (3F)

7:30 Registration

8:00~9:15 (75min.)

<Video presentation of surgical technique in spinal surgery 1>

Chairpersons Masashi KOMAGATA, M.D., Minoru HOSHIMARU, M.D.

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(Department of Spine Surgery, Kameda Medical Center, Kamogawa, Chiba)

FBI-2

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(Center for Spinal Surgery, Nippon Koukan Hospital, Kawasaki, Kanagawa)

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(Spine Center, Department of Neurosurgery, Tominaga Hospital, Osaka, Osaka)

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Shinji IMAE, M.D.

(Department of Neurological Surgery, Imae Clinic, Wakayama, Wakayama)

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(Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)

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 (Department of Neurosurgery, Kindai University Nara Hospital, Ikoma, Nara)

9:15~10:30 (75min.)

<Video presentation of surgical technique in spinal surgery2>

Chairpersons Hitoshi HASE, M.D., Motoo KUBOTA, M.D.

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(The Department of Neurosurgery, Osaka Police Hospital, Osaka, Osaka)

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(Shin-ai Spine Center, Katano Hospital, Katano, Osaka)

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Masashi KOMAGATA, M.D., et al.

(Orthopedic Department, Tamagawa Hospital, Chofu, Tokyo)

17:50 ~ 18:50 (60min.)

Hands-on Session 1 (Postgraduate Lecture of JOA)

Chairperson Yusuke NAKAO, M.D.

HO-1

**Posterior Vertebral Column Resection
-Technique, Tips and Tricks**

John HUTCHINSON, M.D. (Bristol Spire Hospital, Bristol, England)

(Johnson and Johnson K.K. DePuy Synthes)

22 September (Fri.)

Main Hall 4 302 (3F)

7:30 Registration

17:50~18:50 (60min.)

Hands-on Session 2 (Postgraduate Lecture of JOA)

Chairperson Koji SATO, M.D.

HO-2

Correction of adult spinal deformity by XLIF

Yoshiyasu ARAI, M.D. (Department of Orthopedic Surgery,
Saiseikai Kawaguchi General Hospital, Kawaguchi, Saitama)

(NuVasive, Inc.)

19:15~20:45

Banquet

(Hotel Nikko Niigata, Observation room (31F))

22 September (Fri.)

Poster Session Room Snow Hall B (2F)

16:45 ~ 17:45 (60min.)

Poster Session 1

<Spinal deformity>

Chairperson Kenichi WATANABE, M.D.

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Chairperson Masahito HONDA, M.D.

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(Department of Neurospinal Surgery, ShiroishiKyoritsu Hospital, Kishima-gun, Saga)
- P2-4** Two cases of laminar fracture treated by osteosynthesis with headless compression screw system 362
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(Orthopedic Department, Kochi West Hospital, Kochi, Kochi)
- P2-5** Occipito-cervical fixation for an odontoid fracture associated with irreducible atlantoaxial dislocation. ; Report of 2 cases 363
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(Department of Orthopaedic Surgery, Gifu Municipal Hospital, Gifu, Gifu)
- P2-6** The surgical method that conducted cervical locked unilateral facet fracture injured neurosurgeon 364
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(The Department of Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)

Poster Session 3

<Trauma2>

Chairperson Tsuyoshi SATO, M.D.

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(Department of Neurosurgery, Medical Corporation Asuka Sapporo Miyanosawa
Neurosurgical Hospital, Sapporo, Hokkaido)
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(Department of Spine Surgery, Ainomiyako Neurosurgical Hospital, Osaka, Osaka)
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(Orthopaedic Department, Takeda General Hospital, Aizuwakamatsu, Fukushima)
- P3-6** A surgical case of penetrating cervical cord injury due to stabbing
with a kitchen knife 370
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(Department of Neurosurgery, Kurume University School of Medicine, Kurume, Fukuoka)

Poster Session 4

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23 September (Sat.)

Main Hall 1 (Snow Hall A (2F))

7:30 Registration

8:00~9:15 (75min.)

Main Theme 5 <Challenge for infections>

Chairpersons Yutaka HIRAIZUMI, M.D., Satoru SHIMIZU, M.D.

23 Sep. (Sat.) Main Hall 1

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9:15 ~ 10:30 (75min.)

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Po-Quang CHEN, M.D., PhD. (Department of Orthopedic Surgery, National Taiwan University Hospital & Min-Sheng General Hospital, Taipei, Taiwan)

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International Symposium 2

Surgical management and prevention of vertebral artery injury

Chairpersons Masakazu TAKAYASU, M.D., Akiyoshi YAMAZAKI, M.D.

IS2-1

Intraoperative vertebral artery injury 137
Masashi NEO, M.D.
(Department of Orthopedic Surgery, Osaka Medical College, Takatsuki, Osaka)

IS2-2

“Case presentation, treatment, prevention, and risk management” vertebral artery injury 139
Federico P. GIRARDI, M.D.
(Hospital for Special Surgery, Weill College of Medicine, New York, USA)

IS2-3 Preoperative evaluation of the course of vertebral artery at cervical spine for reducing the risk of intraoperative vertebral artery injury 141
 Masashi YAMAZAKI, M.D.
 (Department of Orthopaedic Surgery, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki)

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 Masakazu TAKAYASU, M.D.
 (Aichi Medical University, Nagakute, Aichi)

IS2-5 Management of the vertebral artery in cervical spine surgery 145
 Peter VAJKOCZY, M.D.
 (Department of Neurosurgery, Charite Universitätsmedizin Berlin, Berlin, Germany)

IS2-6 Vertebral artery injury:
 Evaluation of the brain circulation and endovascular managements 147
 Masaki KOMIYAMA, M.D.
 (Osaka City General Hospital, Osaka, Osaka)

15:00 ~ 15:15 Break

15:15 ~ 16:15 (60min.) _____

Tea Time Seminar 1 (Postgraduate Lecture of JOA)

Chairperson Kei MIYAMOTO, M.D.

TTS-1 Hiroshi MIYAMOTO, M.D. (Department of Orthopaedic Surgery, Kinki University Hospital, Osakasayama, Osaka)
 Pathology of cervical kyphosis and treatment 185
 (ALPHATEC PACIFIC, INC.)

16:15 ~ 17:15 (60min.) _____

Main Theme 6-2

<Novel techniques and technologies2>

Chairpersons Kimihiko SAWAKAMI, M.D., Shigeo UEDA, M.D.

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 Tatsushi INOUE, M.D., et al.
 (Department of Neurosurgery, Fujita Health University, Toyoake, Aichi)

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M6-2-6	<p>Cervical stand-alone PEEK cage versus zero-profile anchored spacer in anterior cervical discectomy and fusion: Short term assessment of clinical and radiographic outcome 259</p> <p>Shigeharu FUKAO, M.D., et al. (Department of Neurosurgery, Kyoto Okamoto Memorial Hospital, Kuse-gun, Kyoto)</p>
M6-2-7	<p>Intraoperative visualization of a spinal arachnoid cyst by using pyoktanin blue 260</p> <p>Soichiro TAKAMIYA, M.D., et al. (Department of Neurosurgery, Hokkaido University Graduate School of Medicine, Sapporo, Hokkaido)</p>

17:15~18:15 (60min.)

Main Theme 7 <Challenge for traumas>

Chairpersons Takuya NUMASAWA, M.D., Kiyoshi ITO, M.D.

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M7-7	Efficacy of the decompression about atraumatic cervical cord injury for an acute phase 267 Isao KITAHARA, M.D., et al. (The Department of Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)

18:15~18:30

~ Closing Remarks ~

President Akiyoshi YAMAZAKI, M.D.



23 September (Sat.)

Main Hall 2 (201 (2F))

7:30 Registration

8:00~9:15 (75min.)

Main Theme 8-1

<Countermeasures against complications (nerve, vessel, etc.)1>

Chairpersons Takeshi UCHIDA, M.D., Masanori ITO, M.D.

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(Department of Orthopedic Surgery, Niigata University, Niigata, Niigata) |
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(Department of Orthopedic Surgery, Osaka Medical College, Takatsuki, Osaka) |
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Yohei YUZAWA, M.D., et al.
(Inanami Spine and Joint Hospital, Shinagawa-ku, Tokyo) |
| M8-1-5 | Device of post-operation epidural hematoma prevention when performed single-level MIS-TLIF 272
Junichi UKAI, M.D., et al.
(Orthopedic Department, Japanese Red Cross Nagoya Daini Hospital, Nagoya, Aichi) |
| M8-1-6 | Microsurgical anatomy of the V3 segment in vertebral artery for complication prevention in the craniocervical junction 273
Hisaki UCHIKADO, M.D.
(Uchikado Neuro-Spine Clinic, Fukuoka, Fukuoka) |

M8-1-7	Thinking of the arteria vertebralis injury in the cervical spinal surgery 274 Isao KITAHARA, M.D. (The Department of Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)
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M8-1-9	Two cases of sudden cardiac arrest during C2/3 anterior cervical fusion 276 Naoki OKAMOTO, M.D., et al. (Orthopedic Department, Saitama Red Cross Hospital, Saitama, Saitama)

9:15 ~ 10:30 (75min.)

Main Theme 8-2

<Countermeasures against complications (nerve, vessel, etc.)2>

Chairpersons Masashi NEO, M.D., Eiichiro HONDA, M.D.

M8-2-1	How to prevent face skin trouble under prone positioned spinal surgery? 277 Miyuki FUKUDA, M.D., et al. (Shin-aikai Spine Center, Katano, Osaka)
M8-2-2	The cause and measure of C5 palsy after cervical laminoplasty 278 Takashi YAMAZAKI, M.D., et al. (Department of Orthopaedic Surgery, Musashino Red Cross Hospital, Musashino, Tokyo)
M8-2-3	The effect of backward movement of the spinal cord after laminoplasty with prophylactic foraminotomy for postoperative C5 paralysis 279 Tomohiro IZUMI, M.D., et al. (Spine Center, Orthopedic Department of Niigata Central Hospital, Niigata, Niigata)
M8-2-4	Quantification of green stick fractureevaluation of hinge reaction force measurement and biomechanical stability in laminoplasty 280 Shigeo UEDA, M.D., et al. (Shin-ai Spine Center, Katano Hospital, Katano, Osaka)
M8-2-5	Risk factors of CSF leak after removal of the cervical OPLL and dural closure methods 281 Taku SUGAWARA, M.D., et al. (Department of Spinal Surgery and Neurosurgery, Institute for Brain and Blood Vessels, Akita, Akita)

M8-2-6	<p>The preoperative radiographic risk factor for OPLL resection after posterior decompression and fusion surgery for beak type thoracic OPLL 282</p> <p>Shiro IMAGAMA, M.D., et al. (Department of Orthopaedic Surgery, Nagoya University Graduate School of Medicine, Nagoya, Aichi)</p>
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M8-2-8	<p>Bite injuries associated with motor-evoked potential monitoring 284</p> <p>Takashi KUNIYA, M.D., et al. (Department of Orthopaedics, Kanto Rosai Hospital, Kawasaki, Kanagawa)</p>
M8-2-9	<p>Visual loss as a complication of spine surgery with prone position 285</p> <p>Hideki OHTA, M.D., et al. (Orthopedic Department, Oita Orthopedic Hospital, Oita, Oita)</p>

10:30 ~ 10:45

Break

10:45 ~ 11:45 (60min.)

Spine Leader's Lecture E (Postgraduate Lecture of JOA)

10:45 ~ 11:15 (30min.)

Chairperson Masato TANAKA, M.D.

SLL-E-1 Daisuke SAKAI, M.D. (Department of Orthopaedic Surgery, Tokai University, School of Medicine, Isehara, Kanagawa)

Surgical treatment of spinal deformity patients with complications 165
(Zimmer Biomet G.K.)

11:15 ~ 11:45 (30min.)

Chairperson Toshihiro TAKAMI, M.D.

SLL-E-2 Masakazu TAKAYASU (Department of Neurological Surgery, Aichi Medical University School of Medicine, Nagakute, Aichi)

The role of operative microscope in spinal surgery 167
(Carl Zeiss Meditec CO., Ltd.)

11:45 ~ 11:55

Break

11:55 ~ 12:55 (60分)

Luncheon Seminar 4 (Postgraduate Lecture of JOA)

Chairperson Ken ISHII, M.D.

LS-4

Hiroataka CHIKUDA, M.D., PhD (Department of Orthopaedic Surgery, Gunma University, Maebashi, Gunma)

Surgical management of challenging cervical pathologies 183
(Medtronic Sofamor Danek Co., Ltd.)

12:55-13:00

Break

13:00 ~ 14:00 (60min.)

Main Theme 8-3

<Countermeasures against complications (nerve, vessel, etc.)3>

Chairpersons Hirohiko INANAMI, M.D., Hitoshi KONO, M.D.

M8-3-1

Long term result of adjacent segment disease by anterior cervical foraminotomy (ACF) 286

Yasufumi OHTAKE, M.D., et al.

(Spinal Disorders Center Fujieda Heisei Memorial Hospital,
Department of Neurosurgery, Nakamura Memorial Hospital,
Fujieda, Shizuoka)

M8-3-2

Clinical study of the postoperative incident about locking screws used in anterior cervical fixation with dynamic plates 287

Ryo KADOTA, M.D., et al.

(Orthopedic Department, Numazu City Hospital, Numazu, Shizuoka)

M8-3-3

The incident of locking screw displacement used in anterior cervical corpectomy and fusion more than 4-levels with dynamic plate 288

Ryo KADOTA, M.D., et al.

(Orthopedic Department, Numazu City Hospital, Numazu, Shizuoka)

M8-3-4

Experience of spinous process plate used for prevention of proximal adjacent segment disorders 289

Hideo HOSOE, M.D., et al.

(Orthopedic Department, Gifu Prefectural General Medical Center, Gifu, Gifu)

M8-3-5	Our strategy to prevent proximal junctional failure after adult spinal deformity surgery 290 Yusuke NAKAO, M.D., et al. (Orthopedic Surgery, Spine Center, Sanraku Hospital, Chiyoda-ku, Tokyo)
M8-3-6	Proximal junctional kyphosis following adult spinal deformity surgery with S2 alar iliac screw 291 Yosuke KOBAYASHI, M.D., et al. (Department of Spine and Spinal Cord Surgery, Yokohama Brain and Spine Center, Yokohama, Kanagawa)
M8-3-7	What causes failed back? -Victim of modern instrument technology VOMIT syndrome- 292 Motoo KUBOTA, M.D., et al. (Department of Spinal Surgery, Kameda Medical Center, Kamogawa, Chiba)

14:00 ~ 15:00 (60min.)

Main Theme 9

<Challenge for osteoporosis>

Chairpersons Masafumi MACHIDA, M.D., Keiichi AKATSUKA, M.D.

M9-1	Vertebral body reconstruction from posterior approach by posterior insertion of an ha spacer for delayed paralysis due to osteoporotic vertebral fracture 293 Toshikatsu MAMADA, M.D., et al. (Department of Spine Surgery, JCHO Tokyo Yamate Medical Center, Shinjuku-ku, Tokyo)
M9-2	The outcome of posterior surgery of osteoporotic vertebral fracture in the thoracolumbar spine: Comparisons with reoperation and non-reoperation 294 Taito ITABASHI, M.D., et al. (Orthopedic Department, Towada City Hospital, Towada, Aomori)
M9-3	Anterior-posterior combined surgery using lateral interbody fusion for lumbar spinal canal stenosis associated with osteoporotic vertebral collapse 295 Kentaro FUKUDA, M.D., et al. (Department of Orthopaedic Surgery, Saiseikai Yokohamashi Tobu Hospital, Yokohama, Kanagawa)
M9-4	Minimally invasive lateral corpectomy for adult spinal deformity due to osteoporotic vertebral fracture 296 Uchino KAZUYA, M.D., et al. (Orthopedic Department, The Jikei University Daisan Hospital, Komae, Tokyo)

M9-5	Lateral access corpectomy for patients with kyphotic deformity following osteoporotic vertebral collapse 297 Kazuya FUJIMOTO, M.D., et al. (Orthopedic Department, Kansai Medical University Hospital, Hirakata, Osaka)
M9-6	Posterior fusion without correcting spinal alignment for osteoporotic vertebral fracture (OVF) 298 Nobuhiro HARA, M.D., et al. (Orthopaedic Department, Musashino Red Cross Hospital, Musashino, Tokyo)
M9-7	Surgical management of cervical degenerative spondylolisthesis with osteoporosis 299 Masahito YUZURIHARA, M.D., et al. (Department of Spine Surgery, Kameda Medical Center, Kamogawa, Chiba)

15:00 ~ 15:15 Break

15:15 ~ 16:15 (60min.)

Tea Time Seminar 2 (Postgraduate Lecture of JOA)

Chairperson Koichi SAIRYO, M.D.

TTS-2	Morio MATSUMOTO, M.D. (Department of Orthopaedic Surgery, Keio University, Shibuya-ku, Tokyo) Treatment of spinal deformity with osteoporosis and related problems 187 (Eli Lilly Japan K.K.)
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16:15 ~ 17:25 (70分)

Free Papers 1

<LIF>

Chairpersons Yasuo OHORI, M.D., Takeshi UMEBAYASHI, M.D.

FI-1	The evaluation of LIF for adjacent segmental diseases after posterior lumbar interbody fusion and postoperative lumbar instability 300 Yoichi TANI, M.D., et al. (Department of Orthopaedic Surgery, Kansai Medical University, Hirakata, Osaka)
FI-2	Factors to affect indirect decompression after lateral interbody fusion 301 Takeshi ARIZONO, M.D., et al. (Orthopedic Department, Kyushu Central Hospital, Fukuoka, Fukuoka)

FI-3	Indirect decompression effect of LIF for patients with thoracic myelopathy 302 Jyunki SATO, M.D., et al. (Orthopedic Department, Kansai Medical University Center Hospital, Moriguchi, Osaka)
FI-4	Preoperative evaluation of ureter, great vessels, segmental artery, intestinal tract in LLIF, to avoid injury these organ 303 Takahiro HAYASHI, M.D., et al. (Orthopedic Department, Kochi Health and Sciences Center, Kochi, Kochi)
FI-5	Risk assessment of lumbar segmental artery injury during oblique lateral interbody fusion 304 Taketoshi KUSHIDA, M.D., et al. (Department of Orthopaedic Surgery, Kansai Medical University Hospital, Hirakata, Osaka)
FI-6	Distal junctional complication in lumbar lateral interbody fusion 305 Sei TERAYAMA, M.D., et al. (Sangubashi Spine Surgery Hospital, Shibuya-ku, Tokyo)
FI-7	Proximal and distal junctional complications and reoperation rates in more than 4 level lumbo-sacral fixation cases through lateral interbody fusion for lumbar canal stenosis 306 Yasuo OHORI, M.D., et al. (Sangubashi Spine Surgery Hospital, Shibuya-ku, Tokyo)
FI-8	Unilateral pedicle screw fixation with LIF; Comparison of unilateral versus bilateral pedicle screw fixation 307 Takahiro MACHIDA, M.D., et al. (Orthopedic Department, Kochi Health Sciences Center, Kochi, Kochi)
FI-9	Deteriorated cauda equina symptoms after lateral interbody fusion(LIF): A case report 308 Kazuyoshi YANAGISAWA, M.D. (Orthopedic Department, Aiseikai Yamashina Hospital, Kyoto, Kyoto)

17:25 ~ 18:15 (50min.)

Free Papers 2

<Lumbar spine>

Chairpersons Yoshiro MUSHA, M.D., Keishi TSUNODA, M.D.

F2-1	Is abdominal aortic calcification seen on preoperative lateral lumbar X-ray a predictor of fusion following lumbar spinal fusion surgery? 309 Naoki OKUBO, M.D., et al. (Department of Orthopedic Surgery, Kitasuma Hospital, Kobe, Hyogo)
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F2-2	Cranial adjacent segment disease after posterior lumbar interbody fusion in patients with degenerative lumbar spondylolisthesis by cortical bone trajectory technique 310 Kanji MORI, M.D., et al. (Department of Orthopaedic Surgery, Shiga University of Medical Science, Otsu, Shiga)
F2-3	Surgical results of lumbar interbody fusion for destructive spondyloarthropathy -PLIF with HA spacer combined PLF- 311 Go HAYASAKA, M.D., et al. (Department of Spine Surgery Tokyo Yamate Medical Center, Shinjuku-ku, Tokyo)
F2-4	Clinical comparison of investigation between CBT and PS 312 Eiichiro HONDA, M.D., et al. (Department of Neurospinal Surgery, ShiroishiKyoritsu Hospital, Kishima-gun, Saga)
F2-5	The relationships between spinopelvic alignment and low back pain in patients with rheumatoid arthritis 313 Kazuto MIURA, M.D., et al. (Department of Spine and Spinal Cord Surgery, Nagaoka Red Cross Hospital, Nagaoka, Niigata)
F2-6	Rate of sacroiliac joint degeneration and ankyloses for Japanese elderly people 314 Hiroo SHIRAGA, M.D., et al. (Orthopedic Department, Toyokawa-City-Hospital, Toyokawa, Aichi)
F2-7	Psychological state of lumbar degenerative disease using hospital anxiety and depression scale at the perioperative period -Comparison with knee joint disease cases- 315 Takashi IMURO, M.D., et al. (Department of Orthopedic Surgery, Atsugi City Hospital, Atsugi, Kanagawa)



23 September (Sat.)

Main Hall 3 (301 (3F))

7:30 Registration

8:00~8:55 (55min.)

Free Papers 3 <Cervical spine 1>

Chairpersons Tateru SHIRAIISHI, M.D., Takafumi INOUE, M.D.

F3-1

***In vivo* 3D analysis of cervical endplate subchondral bone density distribution** 316

Takeshi HARA, M.D., et al.

(Department of Neurosurgery, Juntendo University, Bunkyo-ku, Tokyo)

F3-2

Investigation of postoperative neck pain after cervical decompression surgery: Skip laminectomy has an advantage for this pain 317

Yasuyoshi MIYAO, M.D., et al.

(Department of Neurosurgery, Suita Municipal Hospital, Suita, Osaka)

F3-3

Novel concept of posterior decompression and fusion for cervical ossification of the posterior longitudinal ligament 318

Keiichi KATSUMI, M.D., et al.

(Department of Orthopedic Surgery, Uonuma Institute of Community Medicine, Niigata University Medical and Dental Hospital, Minamiuonuma, Niigata)

F3-4

A novel implant for cervical laminoplasty (Laminoplasty Basket) -A retrospective clinical experience of 51 cases- 319

Daichi KAWAMURA, M.D., et al.

(Department of Neurosurgery, Jikei University School of Medicine, Minato-ku, Tokyo)

F3-5

The significance of using the titanium spacer in cervical laminoplasty 320

Kazunari KOGURE, M.D.

(Nippon Medical School, Tama Nagayama, Tama, Tokyo)

F3-6

A new technique of the cervical laminoplasty complicating the unstable lamina 321

Kyoichi SUGITA, M.D.

(Department of Neurosurgery, Azuhata Hospital, Naka, Ibaraki)

F3-7

- Initial radiological findings utilizing titanium basket for cervical open door laminoplasty** 322
Hidenori MATSUOKA, M.D., et al.
(Department of Spinal Surgery, Shin-Yurigaoka General Hospital, Kawasaki, Kanagawa)

8:55~9:50 (55min.)

Free Papers 4 <Cervical spine2>

Chairpersons Hiroshi MIYAMOTO, M.D., Takeshi AOYAMA, M.D.

F4-1

- The examination of drop finger caused by C8 radiculopathy** 323
Tatsuo MAKINO, M.D., et al.
(Orthopedic Department, Uonuma Kikan Hospital, Minamiuonuma, Niigata)

F4-2

- Surgical cases of cervical spondylotic amyotrophy** 324
Yukoh OHARA, M.D., et al.
(Surgical Department of Spine and Peripheral Nerve Disease, Shin-yurigaoka General Hospital, Kawasaki, Kanagawa)

F4-3

- The examination of a surgical remedy and complications of DHS** 325
Hiroshi MARUYAMA, M.D., et al.
(Orthopedic Department, Showa Hospital, Shinagawa-ku, Tokyo)

F4-4

- Pedicle screw-lateral mass screw combined fixation technique in posterior spinal fusion for cervical spine injury.** 326
Ikuko TAKAHASHI, M.D., et al.
(Devison of Orthopedic Surgery Department of Regenerative and Transplant Medicine Niigata University Graduate of Medical and Dental Science Japan, Niigata, Niigata)

F4-5

- Impact of the cervical flexion and extension on global sagittal spinal alignment** 327
Takamitsu KONISHI, M.D., et al.
(Department of Orthopedic Surgery, Tokyo Medical University, Shinjuku-ku, Tokyo)

F4-6

- The time dependent changes of JOACMEQ and patient satisfaction after open door cervical laminoplasty** 328
Hiroaki MANABE, M.D., et al.
(Shin-aikai Spine Center, Katano Hospital, Katano, Osaka)

F4-7

- Early detection of cervical myelopathy in patients with chief complaints in the lower extremities** 329
Tomomi SUNAYAMA, M.D., et al.
(Orthopedic Department, Japanese Red Cross Musashino Hospital, Musashino, Tokyo)

Free Papers 5

<Spinal vascular lesions>

Chairpersons Izumi KOYANAGI, M.D., Isao KITAHARA, M.D.

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| F5-1 | Surgical treatment of the intradural spinal vascular lesions 330
Izumi KOYANAGI, M.D., et al.
(Department of Neurosurgery, Hokkaido Neurosurgical Memorial Hospital,
Sapporo, Hokkaido) |
| F5-2 | Treatment outcome of spinal dural/extradural arteriovenous fistula 331
Yuki TANAKA, M.D., et al.
(Orthopedic Surgery Department, Niigata University, Niigata, Niigata) |
| F5-3 | The efficacy of intraarterial MDCTA as a diagnostic technique
for spinal dural AVF 332
Miyuki FUKUDA, M.D., et al.
(Shin-aikai Spine Center, Katano, Osaka) |
| F5-4 | Draining vein of spinal dural arteriovenous fistula perforating the dura
at segments different from the fistula: Atypical course complicates surgery ... 333
Satoru SHIMIZU, M.D., et al.
(Department of Neurosurgery, Yokohama Brain and Spine Center,
Yokohama, Kanagawa) |
| F5-5 | A case of spinal dural AVF which was difficult to diagnosis 334
Nobuhiro SASAKI, M.D., et al.
(Shin-ai Spine Center, Katano Hospital, Katano, Osaka) |

14:30~17:30 (180min.)

Seminar for young doctor, Nurse, and ME

14:30~15:30 (60min.)

Lecture

【Lumbar spine】 Masayuki OHASHI, M.D.

【MISt】 Keiichi KATSUMI, M.D.

【Cervical spine】 Tomohiro IZUMI, M.D.

15:30~15:40

Break

15:40~17:15 (95min.)

Hands-on Session

17:15~17:30 (15min.)

Q & A

17:30

Closing