

The 23rd Annual Meeting of Japan Society for the Study of Surgical Technique for Spine and Spinal Nerves (JPSTSS)

● Program ●

16 ~ 17 September 2016



16 September (Fri.)

Main Hall 1

7:30 Registration

8:00 ~ 8:05

~ Opening Remarks ~

President Izumi Koyanagi, M.D.

8:05 ~ 8:55 (50min.)

Main Theme 1

<The summit of microsurgery in spine and spinal cord>

Chairpersons Shinsuke Suzuki, M.D., Masahiro Hoshino, M.D.

MI-1

Microsurgical dissection for Spinal hemangioblastoma 139
Hisaoaki Uchikado, M.D.

(Uchikado Neuro-Spine Clinic, Fukuoka, Fukuoka)

MI-2

The utility of intraoperative ICG-VA in the surgery of spinal intramedullary tumors 141
Toshihiro Takami, M.D., et al.
(Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)

M1-3	The surgical outcomes of decompressive laminoplasty with spinous process osteotomy for the treatment of lumbar spinal stenosis 143 Shunsuke Kanbara, M.D., et al. (Orthopedic Department, Nagoya University, Nagoya, Aichi)
M1-4	Efficacy of the key hole surgery with microscope by Wiltse approach for the schwannoma for L2 145 Isao Kitahara, M.D., et al. (Department of Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)
M1-5	Usefulness of widely opening of the bilateral laminae by surugig to paraspinal muscle featured from Kirita-Miyazaki's method for cervical intraspinal canal lesion 147 Atsuhiro Okura, M.D., et al. (Department of Neurosurgery, Nagoya City University Medical School, Nagoya, Aichi)
M1-6	Microscopic decompression to treat lumbar spinal canal stenosis 149 Masami Fujiwara, M.D., et al. (Orthopedic Department, Sada Hospital, Fukuoka, Fukuoka)

8 : 55 ~ 9 : 45 (50min.)

Main Theme 3

〈The summit of spinal deformity surgeries〉

Chairpersons Norio Kawahara, M.D., Nobuyuki Shimokawa, M.D.

M3-1	Comparison of posterior spinal fusion with anterior-posterior spinal fusion with minimally invasive lateral lumbar interbody fusion for adult spinal deformity, minimum 1-year follow up 151 Tsuyoshi Sakuma, M.D., et al. (Department of Orthopaedic Surgery, Seirei Sakura Citizen Hospital, Sakura, Chiba)
M3-2	Staged PSO surgery after OLIF for lumbar kyphosis 153 Yosuke Kobayashi, M.D., et al. (Department of Spine and Spinal Cord Surgery, Yokohama Brain and Spine Center, Yokohama, Kanagawa)
M3-3	A Hybrid Method of Lateral Lumbar Interbody Fusion and Open Posterior Corrective Fusion for Adult Spinal Deformity 155 Yu Yamato, M.D., et al. (Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, Hamamatsu, Shizuoka)

M3-4	Correction surgery using pedicle screw for cervical degenerative kyphosis 157
M3-5	Surgery for cervical kyphosis more than 50 degrees 159 Tomooki Toyone, M.D., et al. (Department of Orthopaedic Surgery, Showa University, Shinagawa-ku, Tokyo)
M3-6	Surgical management of severe cervical kyphosis with myelopathy ... 161 Motoo Kubota, M.D., et al. (Department of Spinal Surgery, Kameda Medical Center, Kamogawa, Chiba)

Main Theme 4

⟨Innovation of spine and spinal cord trauma surgeries⟩

Chairpersons Toshihiro Takami, M.D., Takamitsu Tokioka, M.D.

M4-1	The management and problems of spine and spinal injury in acute stage 〔Key Note Lecture〕 163
	Shinsuke Suzuki, M.D., et al. (Department of Neurosurgery, Emergency and Critical Center, Sendai Medical Center, Sendai, Miyagi)
M4-2	Selection of surgical procedures for cervical spinal injuries under consideration of vertebral artery injuries 165
	Keitaro Tada, M.D., et al. (Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)
M4-3	Minimally invasive stabilization of spines via posterolateral approach for upper cervical spinal injuries 167
	Jiro Yamamoto, M.D., et al. (Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)
M4-4	Treatment for C1-2 fracture in elderly patients—Surgery or halovest?— 169
	Motoo Kubota, M.D., et al. (Department of Spinal Surgery, Kameda Medical Center, Kamogawa, Chiba)
M4-5	Surgical outcomes of temporary short-segment fixation without augmentation for thoracolumbar burst fracture 171
	Hiroyuki Aono, M.D., et al. (Orthopedic Department, National Hospital Organization Osaka National Hospital, Osaka, Osaka)

M4-6

Lumbopelvic fixation of unstable sacral fractures 173

Shozo Kanezaki, M.D., et al.

(Orthopedic Department, Oita University, Yufu, Oita)

10:40 ~ 11:10 (30min.)

Free papers a

⟨Video presentation of surgical technique in spinal surgery ①⟩

Chairpersons Toru Maruyama, M.D., Masanori Ito, M.D.

Fa-1

Conserving procedure for the C2 nerve root by removal of the epidural venous plexus between C1 and C2 significantly contributes to Goel-Harms technique with microscope 175

Isao Kitahara, M.D.

(Department of Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)

Fa-2

A surgical technique for performing an anterior lumbar interbody fusion using a paramedian extraperitoneal approach 177

Tomoaki Kinoshita, M.D., et al.

(Division of Orthopedic Surgery, Narashino-Daiichi Hospital, Narashino, Chiba)

Fa-3

Corpectomy using XLIF approach at thoracolumbar junction 179

Takeshi Umebayashi, M.D., et al.

(Shinagawa Shishokai Hospital, Shinagawa-ku, Tokyo)

Fa-4

Resection technique for spinal ossified lesion 181

Masahito Hara, M.D., et al.

(Department of Neurosurgery, Inazawa Municipal Hospital, Inazawa, Aichi)

11:10 ~ 11:15

Break 5min.

11:15 ~ 12:15 (60min.)

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

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

Chairperson Shunsuke Yano, M.D.

SLL-A-1

Toru Sasamori, M.D. (Department of Neurosurgery, Hokkaido University Graduate School of Medicine, Sapporo, Hokkaido)

Efficacy of spinal cord stimulation using multicontact lead for neuropathic pain due to spinal cord lesions 123

(Medtronic Japan Co., Ltd.)

11 : 45 ~ 12 : 15 (30min.)

Chairperson Junichi Kunogi, M.D.

SLL-A-2 Jean-Paul Steib, M.D. (Spine Surgery Department, University Hospital of Strasbourg, Strasbourg, France)

Artificial disc for one- and two-level DDD: the French and US experiences at five years follow up 124
(LDR Asia Pacific)

11 : 15 ~ 12 : 15 (Spine Leader's Lecture B of Main Hall 2 page 76)

12 : 15 ~ 12 : 25 Break 10min.

12 : 25 ~ 13 : 25 (60min.)

Luncheon Seminar 1 (Postgraduate Lecture of JOA)

Chairperson Koji Kanzaki, M.D.

LS-1 Yusuke Nakao, M.D. (Department of Orthopedic Surgery, Spine Center, Sanraku Hospital, Chiyodaku, Tokyo)

Surgical technique of 3 column osteotomy for adult spinal deformity 111
(Stryker Japan K.K.)

12 : 25 ~ 13 : 25 (Luncheon Seminar 2 of Main Hall 2 page 77)

13 : 25 ~ 13 : 30 Break 5min.

13 : 30 ~ 13 : 45 (15min.)

General Assembly (Report of board meeting and finance)

President Izumi Koyanagi, M.D.

Announcement of President-elect

Akiyoshi Yamazaki, M.D.

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

13 : 45 ~ 14 : 15 (30min.)

Special Lecture

Chairperson Izumi Koyanagi, M.D.

Hiroyasu Kamiyama, M.D. (Teishinkai Hospital)
How to use surgical microscope : Up to date

14:15~14:25

Break 10min.

14:25~15:55 (90min.)

International Symposium 1 Surgical treatment of cervical degenerative spine disorders: anterior or posterior ?

Chairperson Izumi Koyanagi, M.D.

ISI-1

Surgical treatment of cervical degenerative spine disorders in Miami 96

Michael Y Wang, M.D.

(Departments of Neurological Surgery & Rehab Medicine University of Miami
Miller School of Medicine, Miami, USA)

ISI-2

Surgical treatment of multilevel cervical degenerative disease in London 96

David Choi, M.D.

(National Hospital for Neurology and Neurosurgery, London, UK)

ISI-3

Surgical treatment of cervical degenerative spine disorders in Strasbourg 96

Jean-Paul Steib, M.D.

(Spine Surgery Department, University Hospital of Strasbourg, Strasbourg, France)

ISI-4

Optimal Surgical Approach for Degenerative Cervical Disease: What we
should consider before making a decision 97

Hirotaka Chikuda, M.D.

(Department of Orthopaedic Surgery, The University of Tokyo, Bunkyo-ku, Tokyo)

ISI-5

Surgery for cervical spondylosis and OPLL 96

Kazutoshi Hida, M.D.

(Sapporo Azabu Neurosurgical Hospital, Sapporo, Hokkaido)

15:55~16:05

Break 10min.

16:05~16:35 (30min.)

Free papers b

⟨Video presentation of surgical technique in spinal surgery ②⟩

Chairpersons Hitoshi Kono, M.D., Satoru Shimizu, M.D.

Fb-1

Surgical procedure of open-door cervical laminoplasty by a 3 cm skin
incision and 60 minutes 183

Shigeo Ueda, M.D., et al.

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

Fb-2	Microsurgery for ventral schwannoma of cervical spine	185
	Masaki Mizuno, M.D., et al.	
	(Department of Neurosurgery, Mie Graduate School of Medicine, Tsu, Mie)	
Fb-3	Approach of root decompression in anterior cervical discectomy and fusion (ACDF)	187
	Eiichiro Honda, M.D., et al.	
	(Department of Neurospinal Surgery, Shiroishi Kyoritsu Hospital, Kishimagan, Saga)	
Fb-4	A case of giant thoracic subependymoma was available approach in the bilateral dorsal root entry zoon-tomy (DREZotomy).....	189
	Seiji Shigekawa, M.D., et al.	
	(Sapporo Azabu Neurosurgical Hospital, Sapporo, Hokkaido)	

16 : 35 ~ 16 : 40 Break 5min.

16 : 40 ~ 17 : 40 (Poster Session page 94)

17 : 40 ~ 17 : 45 Break 5min.

17 : 45 ~ 18 : 45 (60min.) ——————

Hands-on Session 1

Chairperson Masato Tanaka, M.D.

Minimally invasive spinal deformity surgery

Michael Y Wang, M.D. (Departments of Neurological Surgery & Rehab Medicine University of Miami Miller School of Medicine, Miami, USA)

(DePuy Synthes Japan, Johnson & Johnson K.K.)

17 : 45 ~ 18 : 45 (Hands-on Session 2 of Main Hall 2 page 80)

18 : 45 ~ 18 : 50 Break 5min.

18 : 50 ~ Banquet (Poster Session Room)



16 September (Fri.)

Main Hall 2

7:30 Registration

8:05 ~ 8:55 (50min.)

Main Theme 2-1

〈The summit of minimally invasive surgery in spine and spinal cord ①〉

Chairpersons Yutaka Hiraizumi, M.D., Yasunobu Ito, M.D.

M2-1-1

Minimal invasive surgery of dumbbell type neurinoma 191
Hiroshi Kono, M.D., et al.

(Department of Orthopaedic Surgery, Ishikiriseki Hospital, Higashiosaka, Osaka)

M2-1-2

Clinical outcomes of microsurgical bilateral decompression via unilateral approach for thoracic ossification of the yellow ligament 193
Yoshifumi Takahashi, M.D., et al.

(Orthopedic Department, Izumi Municipal Hospital, Izumi, Osaka)

M2-1-3

Minimally invasive posterior decompression using tube retractor for the adjacent disc disease after anterior cervical discectomy and fusion 195
Taku Sugawara, M.D., et al.

(Department of Spinal Surgery, Research Institute for Brain and Blood Vessels-Akita, Akita, Akita)

M2-1-4

Microscopic unilateral laminectomy for bilateral decompression under tubular retractor for thoracic myelopathy 197
Ryo Kadota, M.D., et al.

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

M2-1-5

Surgical management for lumbar fractures with minimum levels fused 199
Kei Miyamoto, M.D., et al.

(Orthopaedic and Spine Surgery, Gifu Municipal Hospital, Gifu, Gifu)

M2-1-6

Minimum invasive surgical management for lumbar canal stenosis 201
Hisaoaki Uchikado, M.D.

(Uchiakdo Neuro-Spine Clinic, Fukuoka, Fukuoka)

Main Theme 2-2

〈The summit of minimally invasive surgery in spine and spinal cord ②〉

Chairpersons Koji Sato, M.D., Naoki Asami, M.D.

M2-2-1	Minimally invasive surgery of cervical spines via posterolateral approach – pedicle screw fixation and foraminotomy – Takamitsu Tokioka, M.D., et al. (Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)	203
M2-2-2	Investigation of the accuracy, angle and loosening of percutaneous pedicle screw compared with conventional pedicle screw in the same vertebrae Takeshi Hori, M.D., et al. (Center for Spinal Surgery, Nippon Koukan Hospital, Kawasaki, Kanagawa)	205
M2-2-3	Minimally invasive surgical procedures for adjacent segmental disease after MIS-TLIF on patients with degenerative lumbar disease Kazuo Ohmori, M.D., et al. (Center for Spinal Surgery, Nippon Koukan Hospital, Kawasaki, Kanagawa)	207
M2-2-4	Accuracy of C-arm-independent percutaneous pedicle screw placement using the specialized guiding device and nerve root monitoring Yoichi Tani, M.D., et al. (Department of Orthopaedic Surgery, Kansai Medical University Medical Center, Moriguchi, Osaka)	209
M2-2-5	Usefulness of boomerang type cage placement during minimally invasive posterior lumbar interbody fusion on lumbar lordosis Junichi Ukai, M.D., et al. (Orthopedics Department, Nagoya Daini Red Cross Hospital, Nagoya, Aichi)	211

9 : 35 ~ 9 : 40

Break 5min.

9 : 40 ~ 10 : 20 (40min.)

Main Theme 2-3

〈The summit of minimally invasive surgery in spine and spinal cord ③〉

Chairpersons Takanori Saito, M.D., Masaki Mizuno, M.D.

M2-3-1	Cage subsidence of intervertebral cage in LIF	213
	Masayuki Ishihara, M.D., et al. (Orthopedic Department, Kansai Medical University Medical Center, Moriguchi, Osaka)	
M2-3-2	Preoperative risk evaluation using three-phase contrast-enhanced computed tomography for lateral lumbar interbody fusion	215
	Shigeo Ueda, M.D., et al. (Shin-aikai Spine Center, Katano Hospital, Katano, Osaka)	
M2-3-3	Preoperative imaging and intraoperative pitfalls for prevent ureter and colon injury in OLIF	217
	Naoki Asami, M.D. (Ikeda Hospital, Kobayashi, Miyazaki)	
M2-3-4	Corpectomy using X core 2 [®] by lateral MIS approach	219
	Takahiro Hayashi, M.D., et al. (Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)	
M2-3-5	Risk factor analysis of adjacent segment disease following posterior lumbar interbody fusion with cortical bone trajectory	221
	Ken Ninomiya, M.D., et al. (Orthopedic Department, Tokyo Dental College Ichikawa General Hospital, Ichikawa, Chiba)	

10 : 20 ~ 11 : 10 (50min.)

Main Theme 2-4

〈The summit of minimally invasive surgery in spine and spinal cord ④〉

Chairpersons Tateru Shiraishi, M.D., Eiichiro Honda, M.D.

M2-4-1	Usefulness of microendoscopic laminectomy (MEL) for dialysis patients with lumbosacral spondyloisthesis	223
	Yasuomi Nonaka, M.D., et al. (Heiwa Hospital Department Neurosurgery, Spinal Surgery, Yokohama, Kanagawa)	

M2-4-2	Social significance of the decompression method for the lumbar canal stenosis using a percutaneous endoscopy 225 Fujio Ito, M.D., et al.
M2-4-3	Three techniques for further minimally invasive lumbar spinal stenosis surgery 227 Motohide Shibayama, M.D., et al. (Aichi Spine Institute, Tanbagun, Aichi)
M2-4-4	Percutaneous Endoscopic Lumbar Nerve Decompression (PELND) for Extraforaminal Entrapment of the Fifth Lumbar Spinal Nerve at the lumbosacral junction (Far-out Syndrome) 229 Shigeki Urayama, M.D. (Orthopedic Surgery Department, Mizuno Memorial Hospital, Adachi-ku, Tokyo)
M2-4-5	Percutaneous Endoscopic Discectomy (PED) procedure for massive lumbar disc herniation 231 Takahiro Funato, M.D., et al. (Spine Center, Asao General Hospital, Kawasaki, Kanagawa)
M2-4-6	Radiological Comparison Between Percutaneous Endoscopic Cervical Discectomy and Transforaminal Cervical Foraminotomy 232 Jun Ho Lee, M.D. (Department of Neurosurgery, Kyung Hee University Medical Center)

11:10 ~ 11:15

Break 5min.

11:15 ~ 12:15 (60min.)

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

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

Chairperson Takashi Tomita, M.D.

SLL-B-1 Masashi Miyazaki, M.D. (Department of Orthopaedic Surgery, Oita University, Yufu, Oita)
Surgical technique for neglected scoliosis 127
(Alphatec Pacific, Inc.)

11:45 ~ 12:15 (30min.)

Chairperson Naohiro Kawamura, M.D.

SLL-B-2	Shigeo Sano, M.D. (Spine Center, Sanraku Hospital, Chiyodaku, Tokyo) Sanraku formula to calculate the appropriate correction angle in adult spinal deformity	129 (PETER BREHM JAPAN INC.)
----------------	--	---------------------------------

11:15~12:15 (Spine Ledger's Lecture A of Main Hall 1 page 69)

12:15~12:25

Break 10min.

12:25~13:25 (60min.)

Luncheon Seminar 2 (Postgraduate Lecture of JOA)

Chairperson Manabu Ito, M.D.

LS-2

Michael Y Wang, M.D. (Departments of Neurological Surgery & Rehab Medicine
University of Miami Miller School of Medicine, Miami, USA)

Development of an "Enhancing Recovery After Surgery"(ERAS)
Program for lumbar spinal fusion 112
(DePuy Synthes Japan, Johnson & Johnson K.K.)

12:25~13:25 (Luncheon Seminar 1 of Main Hall 1 page 70)

13:25~13:30 Break 5min.

13:45~14:35 (50min.)

Main Theme 8-1

〈Overcome complications and sequela of spinal surgeries ①〉

Chairpersons Futoshi Suetsuna, M.D., Motoo Kubota, M.D.

M8-1-1

Novel dural incision and suturing procedure for preventing postoperative cerebrospinal fluid leakage during the surgical removal of intradural spinal tumors 235

Kiyoshi Ito, M.D., et al.

(Department of Neurosurgery, Shinshu University School of Medicine, Matsumoto,
Nagano)

M8-1-2

Re-operation technique for previous decompression levels of degenerative lumbar disease 237

Takashi Yamazaki, M.D., et al.

(Department of Orthopedic Surgery, Musashino Red Cross Hospital, Musashino,
Tokyo)

M8-1-3

Monitoring of the frictional heat to occur at the time of use of SONOPET 239

Keisuke Fukuda, M.D., et al.

(Orthopedic Department, Sendai East Neurosurgical Hospital, Sendai, Miyagi)

M8-1-4

The influence of aspirin on perioperative bleeding in cervical laminoplasty 241

Miyuki Fukuda, M.D., et al.

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

M8-1-5

- Efficient screening method of venous thromboembolism during perioperative period in patients with lumbar spine disease 243**

Takashi Imuro, M.D., et al.

(Department of Orthopaedic Surgery, Atsugi City Hospital, Atsugi, Kanagawa)

M8-1-6

- Evaluation of the psychological state perioperative period in patients with lumbar degenerative disease using the Hospital Anxiety and Depression Scale 245**

Takashi Imuro, M.D., et al.

(Department of Orthopaedic Surgery, Atsugi City Hospital, Atsugi, Kanagawa)

14 : 35 ~ 15 : 25 (50min.)

Main Theme 8-2

〈Overcome complications and sequela of spinal surgeries ②〉

Chairpersons Macondo Mochizuki, M.D., Taku Sugawara, M.D.

M8-2-1

- Multicenter Surveillance and Risk Factor Analysis of Surgical Site Infections after Lumbar Laminectomy and/or Herniotomy in Adults ... 247**

Satoshi Ogihara, M.D., et al.

(Department of Orthopaedics, Saitama Medical Center, Saitama Medical University, Kawagoe, Saitama)

M8-2-2

- A new attempt of irrigation in spinal surgeries for the prevention of surgical site infection – Intraoperative iodine accumulation and irrigation reduce surgical site infection – 249**

Yuki Onishi, M.D., et al.

(Orthopedic Department, Tokyo Metropolitan Tama Medical Center, Fuchu, Tokyo)

M8-2-3

- Evaluation for location of ureter, great vessels, colon to prevent complication in LLIF 251**

Takahiro Hayashi, M.D., et al.

(Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)

M8-2-4

- Complications of anterior spinal decompression after posterior cervical spinal fusion 253**

Isao Kitahara, M.D., et al.

(Department of Neurosurgery, Chiba Tokushukai Hospital, Funabashi, Chiba)

M8-2-5

- Optimal position of bone graft to prevent migration after anterior cervical corpectomy and fixation 255**

Yuichi Kondo, M.D., et al.

(Department of Spine Center, Gifu Municipal Hospital, Gifu, Gifu)

M8-2-6

To overcome - especially around the hoarseness of unceasing cervical anterior fusion surgery complications reported 257

Kazunari Kogure, M.D., et al.

(Department of Neurological Surgery, Nippon Medical School, Tamanagayama Hospital, Tama, Tokyo)

15:25~15:30

Break 5min.

15:30~16:35 (65min.)

Main Theme 8-3

〈Overcome complications and sequela of spinal surgeries ③〉

Chairpersons Kei Miyamoto, M.D., Shiro Imagama, M.D.

M8-3-1

Management and prevention for complications related to cervical anterior surgery 259

Kei Miyamoto, M.D., et al.

(Orthopaedic and Spine Surgery, Gifu Municipal Hospital, Gifu, Gifu)

M8-3-2

The Case of Pyogenic Spondylitis after Anterior Cervical Decompression and Fusion 261

Yoshinobu Hagihara, M.D.

(Orthopedic Department, JCHO Tokyo Joto Hospital, Kotoku, Tokyo)

M8-3-3

Late hydrocephalus treated conservatively secondary to liquorhea after cervical laminoplasty: A case report 263

Shingo Kumaki, M.D., et al.

(Orthopedic Department, Center Hospital of the National Center for Global Health and Medicine, Shinjuku-ku, Tokyo)

M8-3-4

Intraoperative cervical fracture with ankylosed spine due to the psoriatic arthritis 265

Fumiko Saiki, M.D., et al.

(Department of Orthopedic Surgery, School of Medicine, Tokyo University, Bunkyo-ku, Tokyo)

M8-3-5

A case in which implant failure was triggered by vertebral fusion for lumbar compression fracture in a patient with Parkinson's disease 267

Yasuomi Nonaka, M.D., et al.

(Heiwa Hospital Department Neurosurgery, Spinal Surgery, Yokohama, Kanagawa)

M8-3-6

Complications of surgery for thoracic ossification of ligament in obese patients 269

Kei Ando, M.D., et al.

(Orthopedic Department, Nagoya University, Nagoya, Aichi)

M8-3-7

- Knotless bared sutures of fascial layers for preventing cerebrospinal fluid leakage 271
Tetsuryu Mitsuyama, M.D., et al.
(Shinagawa Shishokai Hospital, Shinagawa-ku, Tokyo)

M8-3-8

- Evaluation of intervertebral foramen in prophylactic foraminotomy for cervical laminoplasty 273
Tomohiro Izumi, M.D., et al.
(Spine Center, Orthopedic Department, Niigata Central Hospital, Niigata, Niigata)

16:35~16:40 Break 5min.

16:40~17:40 (Poster Session page 94)

17:40~17:45 Break 5min.

17:45~18:45 (60min.)

Hands-on Session 2

Practice of the technical points of vertebral body osteotomy—For more precise and less invasive surgery—

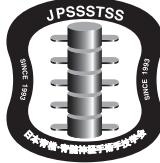
Shigeo Sano, M.D. (Spine Center, Sanraku Hospital, Chiyodaku, Tokyo)

(PETER BREHM JAPAN INC.)

17:45~18:45 (Hands-on Session 1 of Main Hall 1 page 72)

18:45~18:50 Break 5min.

18:50~ Banquet (Poster Session Room)



17 September (Sat.)

Main Hall 1

7:30 Registration

8:00 ~ 8:50(50min.)

Main Theme 7-1

〈Innovation of surgical techniques and assisted systems in spinal surgeries ①〉

Chairpersons Toshiki Endo, M.D., Masahito Hara, M.D.

M7-1-1	A new application of Piezo actuator-driven pulsed waterjet in dissecting the spinal cord 〔Key Note Lecture〕 Toshiki Endo, M.D., et al. (Department of Neurosurgery, Tohoku University, Sendai, Miyagi)	275
M7-1-2	Surgical management of spinal dural AVF for safety Hirotomo Kageyama, M.D., et al. (Department of Neurosurgery, Hyogo College of Medicine, Nishinomiya, Hyogo)	277
M7-1-3	Spine surgery within the hybrid operating room Keita Kuraishi, M.D., et al. (Department of Neurosurgery, Mie University, Tsu, Mie)	279
M7-1-4	Preoperative simulation of crano-vertebral junction (CVJ) tumors using CT-MRI multimodality fusion image Hiroyuki Nakase, M.D., et al. (Department of Neurosurgery, Nara Medical University, Kashihara, Nara)	281
M7-1-5	Evaluation of the intervertebral foramen of the cervical spine by high resolution MRI Ikuo Aita, M.D., et al. (Orthopedic Department, Tsukuba Medical Center Hospital, Tsukuba, Ibaraki)	283
M7-1-6	Preoperative 3D CT/MRI fusion imaging for percutaneous endoscopic lumbar surgeries and foraminoplasty technique Yoshinori Kyoh, M.D., et al. (KYOH Orthopaedics & Neurosurgery Clinic, Amagasaki, Hyogo)	285

8 : 50 ~ 8 : 55

Break 5min.

8 : 55 ~ 9 : 45 (50min.)

Main Theme 7-2

〈Innovation of surgical techniques and assisted systems in spinal surgeries ②〉

Chairpersons Akiyoshi Yamazaki, M.D., Hiroyuki Nakase, M.D.

M7-2-1	An evaluation of the new lamina spacer that can be applied to open door and french door laminoplasty – Clinical outcomes and bone union of the spacer and opened lamina (Key Note Lecture) 287
	Futoshi Suetsuna, M.D., et al. (Orthopedic Department, Hachinohe Municipal Hospital, Hachinohe, Aomori)
M7-2-2	The accuracy and reliability of the Screw Guide Template system for the screw insertion in cervical and upper-thoracic spine 289
	Shuichi Kaneyama, M.D., et al. (Department of Orthopaedic Surgery, Kobe Rosai Hospital, Kobe, Hyogo)
M7-2-3	The accuracy of cervical pedicle screw insertion 291
	Nobuyuki Shimokawa, M.D., et al. (Department of Neurosurgery, Tsukazaki Hospital, Himeji, Hyogo)
M7-2-4	The Accuracy of Pedicle Screw Placement Using Intraoperative CT Imaging 293
	Akira Matsuoka, M.D., et al. (Department of Orthopaedic Surgery, Showa University, Shinagawa-ku, Tokyo)
M7-2-5	Surgical Results of Posterior Cervical Fusion Using O-arm Based Navigation System and New Techniques with New Devices 295
	Keiji Wada, M.D., et al. (Orthopedic Department, Tokyo Women's Medical University, Shinjuku-ku, Tokyo)
M7-2-6	Minimally Invasive Percutaneous Pedicle Screw Placement using an Illuminated Retractor for Decreasing the Risks of K-wire Use and Radiation Exposure 297
	Takeshi Ohki, M.D., et al. (Orthopedic Department, Yuki Hospital, Yuki, Ibaraki)

9 : 45 ~ 9 : 55

Break 10min.

9 : 55 ~ 10 : 55 (60min.)

Tea Time Seminar 1

Chairperson Izumi Koyanagi, M.D.

TS-1

Tateru Shiraishi, M.D. (Tokyo Dental College Ichikawa General Hospital, Ichikawa, Chiba)
Spinal microsurgery : Spine and surgical microscope 119
(Carl Zeiss Meditec CO., Ltd.)

9 : 55 ~ 10 : 55 (Tea Time Seminar 2 of Main Hall 2 page 90)

10 : 55 ~ 11 : 00 Break 5min.

11 : 00 ~ 12 : 00 (60min.)

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

11 : 00 ~ 11 : 30 (30min.)

Chairperson Kanji Sasaki, M.D.

SLL-C-1

Wataru Narita, M.D. (Department of Orthopaedics, Midorigaoka Hospital, Takatsuki, Osaka)
Lateral lumbar interbody fusion and percutaneous pedicle screws
placed in patients in the lateral decubitus position 131
(KYOCERA Medical Corporation)

11 : 30 ~ 12 : 00 (30min.)

Chairperson Masashi Neo, M.D.

SLL-C-2

Akira Shinohara, M.D. (Department of Orthopaedic Surgery, Jikei University Daisan

Hospital, Komae, Tokyo)

Surgical procedure and pitfalls of minimally invasive lateral
corpectomy 133
(NuVasive Japan Inc.)

11 : 00 ~ 12 : 00 (Spine Leader's Lecture D of Main Hall 2 page 90)

12 : 00 ~ 12 : 10 Break 10min.

12:10~13:10 (60min.)

Luncheon Seminar 3 (Postgraduate Lecture of JOA)

Chairperson Shigeru Hirabayashi, M.D.

LS-3

Hisamitsu Ide, M.D. (Department of Urology, Teikyo University School of Medicine, Itabashi-ku, Tokyo)

Healthy aging for men, background knowledge for spinal surgeon

115

(Hisamitsu Pharmaceutical Co., Inc.)

12:10~13:10 (Luncheon Seminar 4 of Main Hall 2 page 91)

13:10~13:20 Break 10min.

13:20~13:50 (30min.)

Key Spine Lecture

Chairperson Hitoshi Hase, M.D.

13:20~13:35 (15min.)

KSL-1

Tokumi Kanemura, M.D. (Spine Center, Konan Kosei Hospital, Konan, Aichi)

Anatomical understanding of retroperitoneal space for lateral approach to the spine

13:35~13:50 (15min.)

KSL-2

Koichi Sairyo, M.D. (Department of Orthopedic Surgery, Tokushima University, Tokushima, Tokushima)

Smiley Face Rod method for surgical treatment of spondylolysis in athletes

13:20~13:50 (World Leader's Lecture ① of Main Hall 2 page 91)

13:50~13:55 Break 5min.

13:50~14:20 (World Leader's Lecture ② of Main Hall 2 page 91)

13 : 55 ~ 15 : 35 (100min.)

International Symposium 2 Surgical management of Adult spinal deformity : Open or MIS^t ?

Chairperson Shigeo Sano, M.D.

IS2-1	Pedicle subtraction osteotomies	98
	Andrew A. Sama, M.D. (The Hospital for Special Surgery, New York, USA)	
IS2-2	Staged 3 column osteotomy surgery for adult spinal deformity	101
	Yusuke Nakao, M.D., et al. (Department of Orthopedic Surgery, Spine Center, Sanraku Hospital, Chiyoda-ku, Tokyo)	
IS2-3	Surgical tips of pedicle subtraction osteotomy for adult spinal deformity	103
	Tomoaki Toyone, M.D., et al. (Department of Orthopaedic Surgery, Showa University, Shinagawa-ku, Tokyo)	
IS2-4	Minimally invasive approach to adult spine deformity using minimally invasive stabilization (MIS ^t) technique	105
	Takanori Saito, M.D., et al. (Orthopedic Department, Kansai Medical University Medical Center, Moriguchi, Osaka)	
IS2-5	Indication of L5-S1 fusion in correction of adult spinal deformities for sagittal alignment	107
	Eiji Abe, M.D., et al. (Department of Orthopedic Surgery, Akita Kousei Medical Center, Akita, Akita)	
IS2-6	Segmental translation and dual cantilever technique using reduction screws for adult spinal deformity	109
	Kentaro Fukuda, M.D., et al. (Orthopedic Surgery Department, Saiseikai Yokohamashi Tobu Hospital, Yokohama, Kanagawa)	

14 : 25 ~ 14 : 40 (Key Spine Lecture ③ of Main Hall 2 page 91)

15 : 35 ~ 15 : 40 Break 5min.

Main Theme 6

〈Innovation of peripheral nerve surgeries for spinal disorders〉

Chairpersons Kyongsong Kim, M.D., Yoichi Aota, M.D.

M6-1	Treatment of superior cluneal entrapment neuropathy for low back and lower limb pain 〔Key Note Lecture〕 Kyongsong Kim, M.D., et al. (Department of Neurosurgery, Chiba Hokuso Hospital, Nippon Medical School, Inzai, Chiba)	299
M6-2	Treatment strategy for low back pain and leg pain after lumbar surgery for lumbar disc herniation..... Tomohiro Yamauchi, M.D., et al. (Department of Neurosurgery, Kushiro Rosai Hospital, Kushiro, Hokkaido)	301
M6-3	Importance of thoracic outlet syndrome in practice of spine surgery ... Masakazu Takayasu, M.D., et al. (Department of Neurological Surgery, Aichi Medical University, Nagakute, Aichi)	303
M6-4	Evaluation and management for peroneal nerve entrapment Yasuhiro Nakajima, M.D., et al. (Department of Neurosurgery, Inazawa Municipal Hospital, Inazawa, Aichi)	305
M6-5	Investigation of superior cluneal nerve disorder in the perioperative period of thoracolumbar surgery Yu Yamamoto, M.D., et al. (Department of Neurosurgery, Inazawa Municipal Hospital, Inazawa, Aichi)	307
M6-6	The actual condition survey of spinal and peripheral nerve diseases by means of analysis of Shibire outpatient clinic Masato Noji, M.D., et al. (Department of Neurosurgery, Kanagawa Prefectural Ashigarakami Hospital, Ashigarakamigun, Kanagawa)	309
M6-7	Surgeries for superior/middle cluneal nerve entrapment Yoichi Aota, M.D., et al. (Department of Spine & Spinal Cord, Yokohama Brain and Spine Center, Yokohama, Kanagawa)	311
M6-8	A case of comorbid Tarsal tunnel syndrome and Morton's Metatarsalgia effectively treated with neurolysis for increasing symptoms of plantar with each advancing lumbar degenerative diseases Yasuhiro Chiba, M.D., et al. (Department of Neurosurgery, Hokkaido Neurosurgical Memorial Hospital, Sapporo, Hokkaido)	313

16 : 50 ~ 17 : 00 (10min.)

President Lecture
President Izumi Koyanagi, M.D.

Where spinal surgery is going ?

~ Closing Remarks ~
President Izumi Koyanagi, M.D.



17 September (Sat.)

Main Hall 2

7:30 Registration

8:00 ~ 8:50 (50min.)

Main Theme 5-1

〈Innovation of surgeries of spinal degenerative diseases ①〉

Chairpersons Masatoshi Sumi, M.D., Masakazu Takayasu, M.D.

M5-1-1	Anterior hybrid decompression and fusion method for cervical OPLL with multilevel lesion Macondo Mochizuki, M.D., et al. (Department of Orthopaedic Surgery, Numazu City Hospital, Numazu, Shizuoka)	315
M5-1-2	Surgical outcomes of posterior spinal fusion alone for cervical disorders associated with athetoid cerebral palsy Kei Watanabe, M.D., et al. (Department of Orthopedic Surgery, Niigata University Medical and Dental Hospital, Niigata, Niigata)	317
M5-1-3	C1-2 transarticular fixation using canulated pedicle screw Kanji Mori, M.D., et al. (Department of Orthopaedic Surgery, Shiga University of Medical Science, Otsu, Shiga)	319
M5-1-4	The significance of using the titanium spacer in cervical laminoplasty Kazunari Kogure, M.D., et al. (Department of Neurological Surgery, Nippon Medical School, Tamanagayama Hospital, Tama, Tokyo)	321
M5-1-5	Operative procedure and results of laminoplasty preserving the paraspinal muscle Yugo Orita, M.D., et al. (Orthopedic Department, Kanazawa Medical University Hospital, Kahokugun, Ishikawa)	323

M5-1-6

Open door laminoplasty using cervical plates: evaluation of 1-year follow-up 325

Hideki Tashi, M.D., et al.

(Spine Center, Orthopedic Department, Niigata Central Hospital, Niigata, Niigata)

8 : 50 ~ 9 : 50 (60min.)

Main Theme 5-2

⟨Innovation of surgeries of spinal degenerative diseases ②⟩

Chairpersons Takashi Yamazaki, M.D., Hirohiko Inanami, M.D.

M5-2-1

Anterior decompression surgery for thoracic myelopathy 327

Atsuomi Aiba, M.D., et al.

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

M5-2-2

Transforaminal thoracic interbody fusion (TTIF) for thoracic disc herniation 329

Takashi Kusakabe, M.D., et al.

(Department of Orthopaedic Surgery, Tohoku Rosai Hospital, Sendai, Miyagi)

M5-2-3

Compaction Bone Grafting Technique for Posterior Lumbar Interbody Fusion 331

Mikinobu Takeuchi, M.D., et al.

(Spine Center, Aichi Medical University, Nagakute, Aichi)

M5-2-4

The validity of spinal fusion for severe unstable degenerative lumbar spondylolisthesis with preoperative translation more than 5mm 333

Toshihiko Inui, M.D., et al.

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

M5-2-5

Can the artificial bone serve as the ilium for LLIF 335

Takahiro Hayashi, M.D., et al.

(Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)

M5-2-6

Inserting CBT screw on lateral position as an inventive way of fixation after XLIF procedure 337

Seiji Otsuka, M.D., et al.

(Department of Orthopedic Surgery, Nagoya City University, Graduate School of Medical Sciences, Nagoya, Aichi)

M5-2-7

Compression between LLIF and MIS – TLIF-one year follow up – 339

Keita Nakayama, M.D., et al.

(Department of Orthopedic Surgery, Seirei Sakura Citizen Hospital, Sakura, Chiba)

9 : 50 ~ 9 : 55

Break 5min.

9 : 55 ~ 10 : 55 (60min.)

Tea Time Seminar 2

Chairperson Morio Matsumoto, M.D.

TS-2

Yukihiro Matsuyama, M.D. [Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, Hamamatsu, Shizuoka]

Surgical strategy for elderly spinal deformity with osteoporotic vertebral fracture 121
(Eli Lilly Japan K.K.)

9 : 55 ~ 10 : 55 (Tea Time Seminar 1 of Main Hall 1 page 83)

10 : 55 ~ 11 : 00

Break 5min.

11 : 00 ~ 12 : 00 (60min.)

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

11 : 00 ~ 11 : 30 (30min.)

Chairperson Junichi Mizuno, M.D.

SLL-D-1

Andrew A. Sama, M.D. [The Hospital for Special Surgery, New York, USA]

Lateral Access Hybrid Techniques for Adult Spinal Deformity 134
(Japan Medical Dynamic Marketing, INC.)

11 : 30 ~ 12 : 00 (30min.)

Chairperson Tomoaki Toyone, M.D.

SLL-D-2

Eiji Abe, M.D. [Department of Orthopedic Surgery, Akita Kousei Medical Center, Akita, Akita]

Surgical management for kyphotic deformity with osteoporotic vertebral fractures—minimally invasive lateral approach combined with posterior fixation— 137
(MIZUHO Corporation)

11 : 00 ~ 12 : 00 (Spine Leader's Lecture C of Main Hall 1 page 83)

12 : 00 ~ 12 : 10

Break 10min.

12:10~13:10 (60min.)

Luncheon Seminar 4 (Postgraduate Lecture of JOA)

Chairperson Kota Suda, M.D.

LS-4

Ken Ishii, M.D. [Department of Orthopaedic Surgery, Keio University, Shinjuku-ku, Tokyo)
Complications in the spinal surgery—Prevention and Treatment—

117

(Medtronic Sofamor Danek, Co., Ltd.)

12:10~13:10 (Luncheon Seminar 3 of Main Hall 1 page 84)

13:10~13:20 Break 10min.

13:20~14:20 (60min.)

World Leader's Lecture(Postgraduate Lecture of JOA)

13:20~13:50 (30min.)

Chairperson Toshitaka Seki, M.D.

WLL-1

Michael G. Fehlings, M.D. [Toronto Western Hospital, University of Toronto, Toronto, Canada)
Surgical management of acute spinal cord injury

13:50~14:20 (30min.)

Chairperson Kiyoshi Kumano, M.D.

WLL-2

David Choi, M.D. [National Hospital for Neurology and Neurosurgery, London, UK)
Surgical management of cervical spinal tumors except for cervical
cord tumors

13:20~13:35 (Key Spine Lecture ① of Main Hall 1 page 84)

13:35~13:50 (Key Spine Lecture ② of Main Hall 1 page 84)

13:55~15:35 (International Symposium 2 of Main Hall 1 page 85)

14:20~14:25 Break 5min.

14:25~14:40 (15min.)

Key Spine Lecture

Chairperson Izumi Koyanagi, M.D.

KSL-3

Michael G. Fehlings, M.D. [Toronto Western Hospital, University of Toronto, Toronto, Canada)
Surgical treatment of cervical spondylotic myelopathy

14:40~14:45

Break 5min.

Free papers c
〈Anterior cervical surgery, others〉

Chairpersons Hideo Hosoe, M.D., Fumio Hasue, M.D.

Fc-1	Clinical reports of anterior cervical discectomy and fusion using zero-profile cage	341
	Ryuta Kono, M.D., et al. (Spine Center, Shinagawa Shishokai Hospital, Shinagawa-ku, Tokyo)	
Fc-2	Immobilization of the cervical spine, cage subsidence and bony union after single-level anterior cervical discectomy and fusion using a poltetheretherketone cage, without plating and iliac crest harvesting ...	343
	Norihiro Minami, M.D., et al. (Orthopedic Department, Kashiwa City Hospital, Kashiwa, Chiba)	
Fc-3	Efficacy of cervical pedicle screw fixation for ossification of posterior longitudinal ligaments of cervical spine	345
	Takamitsu Tokioka, M.D., et al. (Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)	
Fc-4	Sequential changes of CT and MRI findings of ossification of posterior longitudinal ligaments of cervical spine fixed with pedicle screw systems	347
	Keitaro Tada, M.D., et al. (Department of Orthopedic Surgery, Kochi Health Sciences Center, Kochi, Kochi)	
Fc-5	Balloon kyphoplasty for thoracolumbar osteoporotic vertebral fracture. Determination about surgical outcome depending on fracture type.....	349
	Toshiyuki Takahashi, M.D., et al. (Spinal Disorders Center, Fujieda Heisei Memorial Hospital, Fujieda, Shizuoka)	
Fc-6	Risk factors for vertebral endplate cysts after PLIF using cortical bone trajectory procedure	351
	Akira Nakamura, M.D., et al. (Department of Orthopedic Surgery, Shiga University of Medical Science, Otsu, Shiga)	
Fc-7	Is the accurate placement of the OLIF cage difficult?.....	353
	Naoki Okubo, M.D., et al. (Orthopedic Department, Kitasuma Hospital, Kobe, Hyogo)	
Fc-8	Analysis of pathology and operative procedure for pedicle fracture in patients with osteoporotic lumbar vertebral fracture	355
	Yujiro Hirao, M.D., et al. (Department of Spine and Orthopaedic Surgery, Japanese Red Cross Medical Center, Shibuya-ku, Tokyo)	

15:45~15:50

Break 5min.

15:50~16:40 (50min.)

Free papers d

〈Spinal tumors/Intradural lesions, others〉

Chairpersons Makoto Taniguchi, M.D., Hisaaki Uchikado, M.D.

Fd-1	Surgical treatment of intradural metastatic spinal tumor	357
	Homare Nakamura, M.D., et al. (Division of Neurosurgery, St. Marianna University School of Medicine Yokohama City Seibu Hospital, Yokohama, Kanagawa)	
Fd-2	Surgical outcome of spinal adhesive arachnoiditis	359
	Kentaro Naito, M.D., et al. (Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)	
Fd-3	Transition of reconstruction method for lamina after spinal tumor resection	361
	Keishi Tsunoda, M.D., et al. (Department of Neurosurgery, Nagasaki University Hospital, Nagasaki, Nagasaki)	
Fd-4	Tips for preventing postoperative tissue adhesion in intramedullary tumor removal	363
	Takeshi Hara, M.D., et al. (Department of Neurosurgery, Juntendo University, Bunkyo-ku, Tokyo)	
Fd-5	The atlantoaxial instability after C1 laminectomy without C1/2 fusion ...	365
	Masao Ryu, M.D., et al. (Department of Orthopaedic Surgery, Kobe Rosai Hospital, Kobe, Hyogo)	
Fd-6	Treatment of dural arteriovenous fistulas at the craniocervical junction fed by ascending pharyngeal artery.....	367
	Kinya Nakanishi, M.D., et al. (Department of Neurosurgery, Kindai University Nara Hospital, Ikoma, Nara)	
Fd-7	Cervical spinal radicular arteriovenous fistula shunted on C1 ventral root with varix presenting as subarachnoid hemorrhage.....	369
	Motoyuki Iwasaki, M.D., et al. (Neurosurgical Department, Otaru General Hospital, Otaru, Hokkaido)	



16 September (Fri.)

Poster Session Room

16 : 40 ~ 17 : 40 (60min.) —————

Session 1 P1-1 ~ 7

Chairperson Toshiyuki Takahashi, M.D.

Session 2 P2-1 ~ 9

Chairperson Hiroshi Miyamoto, M.D.

Session 3 P3-1 ~ 9

Chairperson Katsushi Takeshita, M.D.

Session 4 P4-1 ~ 8

Chairpersons Akiro Higashikawa, M.D., Takeshi Umebayashi, M.D.

Session 5 P5-1 ~ 9

Chairpersons Satoshi Ogihara, M.D., Shigeo Ueda, M.D.

Session 6 P6-1 ~ 9

Chairperson Kiyoshi Ito, M.D.

Session 7 P7-1 ~ 9

Chairperson Kenichi Watanabe, M.D.

Session 8 P8-1 ~ 9

Chairpersons Toshikatsu Mamada, M.D., Yasuo Oohori, M.D.

Session 9 P9-1 ~ 9

Chairperson Yukoh Ohara, M.D.

Session 10 P10-1 ~ 9

Chairperson Hideki Ohta, M.D.

Session 11 P11-1 ~ 9

Chairpersons Nobuhiro Hara, M.D., Yasuhiro Chiba, M.D.

* Abstracts are only a Japanese language.