

# The 17th Annual Meeting of Japan Society for the Study of Surgical Technique for Spine and Spinal Nerves (JSSSTSS)

● Program ●

17 ~ 18 September 2010



17 September (Fri.)

Main Hall 1

8 : 00 Registration

8 : 25 ~ 8 : 30

~ Opening Remarks ~

President Takeshi Uchida, M.D.

8 : 30 ~ 9 : 25 (55min.)

## Main Theme 3-a

### < MISS-1 >

Chairpersons Takeshi Uchida, M.D., Nobuyuki Shimokawa, M.D.

M3-a1

Accuracy of pedicle screw insertion in MIS-TLIF versus Traditional Open PLIF ..... 146

Go Yoshida, M.D., et al.

(Department of Orthopedic Surgery, Hamamatsu Medical Center, Hamamatsu, Shizuoka)

M3-a2

Herniotomy using spinous process splitting approach and partial laminectomy for central type lumbar disc herniation ..... 148

Hideaki Imabayashi, M.D., et al.

(Department of Orthopedic Surgery, National Defense Medical College, Tokorozawa, Saitama)

M3-a3

Applications and pitfalls of percutaneous endoscopic lumbar discectomy..... 150

Fujio Ito, M.D., et al.

(Aichi Spine Institute, Niwa, Aichi)

M3-a4

Percutaneous vertebroplasty with hydroxyapatite under local anesthesia for the treatment of osteoporotic vertebral burst fractures ..... 152

Shigeki Urayama, M.D., et al.

(Orthopedic Department, Takaoka City Hospital, Takaoka, Toyama)

M3-a5

Anterior and posterior foraminotomy in cervical spine lesion — Technique and appropriate use — ..... 154

Hidetoshi Murata, M.D., et al.

(Department of Neurosurgery, Yokohama City University, Graduate School of Medical Sciences and School of Medicine, Yokohama, Kanagawa)

M3-a6

New method to place the drain tube on the proper position for microendoscopic decompression ..... 156

Kentaro Mizuno, M.D., et al.

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

9 : 25 ~ 9 : 35

Break 10min.

9 : 35 ~ 10 : 30 (55min.)

## Main Theme 2-a < LBP >

Chairpersons Norio Kawahara, M.D., Hitoshi Hase, M.D.

M2-a1

Surgical results of anterior lumbar interbody fusion through the paramedian extraperitoneal approach in treatment of chronic discogenic low back pain at the lower lumbar spine: comparison between anterior interbody fusion alone and that associated with posterior fixation using pedicle screws ... 126

Tomoaki Kinoshita, M.D., et al.

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

M2-a2

Novel surgical intervention for low back pain associated with degenerative lumbar scoliosis in the elderly ..... 128

Kiyotaka Yamada, M.D., et al.

(Department of Orthopaedic Surgery, Hiroshima General Hospital, Hatsukaichi, Hiroshima)

**M2-a3**

**Clinical results of Muscle-Preserving Interlaminar Decompression(MILD) for lumbar spinal canal stenosis (LSCS) with low back pain (LBP) ... 130**

Shigeyuki Kitanaka, M.D., et al.

(Orthopedic Department, Maizuru Red Cross Hospital, Maizuru, Kyoto)

**M2-a4**

**The study of discogenic low back pain treated by spinal instrumentation ..... 132**

Takeshi Umebayashi, M.D., et al.

(Shin-Yokoham Spine Clinic, Yokoham, Kanagawa)

**M2-a5**

**Clinical results of microendoscopic decompression via midline approach for degenerative spondylolisthesis with low back pain ..... 134**

Yasuo Mikami, M.D., et al.

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

**M2-a6**

**Clinical results of MIS-TLIF for lumbar disc lesion with Modic changes ..... 136**

Yasuhito Kaneko, M.D., et al.

(Department of Orthopedic Surgery, Kawasaki Municipal Kawasaki Hospital, Kawasaki, Kanagawa)

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

## Free Papers d < L-HNP >

Chairpersons Makoto Taniguchi, M.D.

**F-d1**

**Two curative cases with lumbar disk hena complicated with ring apophysis fracture ..... 270**

Eiichiro Honda, M.D., et al.

(Department of Neurospinal Surgery, Shiroishi Kyoritsu Hospital, Kishima, Saga)

**F-d2**

**Surgical strategy of far lateral lumbar disc herniation and foraminal stenosis ..... 272**

Yohei Kudo, M.D., et al.

(Department of Neurosurgery, Nishijima Hospital, Numazu, Shizuoka)

10 : 45 ~ 11 : 00

Break 15min.

11 : 00 ~ 12 : 10 (70min.)

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

11 : 00 ~ 11 : 17 (17min.)

Chairperson Takanori Saito, M.D.

**SLL-I**

**Koji Sato, M.D.**

(Department of Orthopedic and Spine Surgery, Nagoya Daini Red Cross Hospital,  
Nagoya, Aichi)

**Percutaneous spine implant VIPER system and Seminar for minimally  
invasive spine stabilization** ..... 78

(Johnson & Johnson Co. DePuy Spine)

11 : 17 ~ 11 : 34 (17min.)

Chairperson Takashi Yamazaki, M.D.

**SLL-II**

**Junichi Kunogi, M.D.** (Japanese Red Cross Medical Center Dept. of Spine  
and Orthop. Surg. Spine Center, Shibuya-ku, Tokyo)

**Hybrid type spinal stabilization and fusion system (UFS system :  
Universal Fusion and Stabilization system) for the treatment of  
degenerative lumbar spinal disease** ..... 80

(Century Medical Inc.)

11 : 34 ~ 11 : 51 (17min.)

Chairperson Shigeru Hirabayashi, M.D.

**SLL-III**

**Ryuichi Takemasa, M.D.** (Department of Orthopaedic Surgery, Kochi  
Medical School, Nankoku, Kochi)

**Recent advances of calcium phosphate cement vertebroplasty**  
..... 82

(Hoya Co.)

11 : 51 ~ 12 : 08 (17min.)

Chairperson Daisuke Togawa, M.D.

**SLL-IV**

**Chun-Kun Park, M.D., Ph.D.** (Spine Center and Department of Neurosurgery,  
Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, Korea)

**Percutaneous vertebral augmentations in acute osteoporotic vertebral  
fractures: Therapeutic role of "balloone-kypoplasty"** ..... 84

(Medtronic Sofamor-Danek Japan Co.)

12 : 10 ~ 12 : 20

Break 10min.

12 : 20 ~ 13 : 20

(Hands-on Session A 53 page)

13 : 20 ~ 13 : 30

Break 10min.

13 : 30 ~ 14 : 30 (60min.)

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## Special Lecture I (Postgraduate Lecture of JOA)

Chairpersons Takeshi Uchida, M.D.

**SL-I**

**Jeffrey C. Wang, M.D.** (Professor of Orthopedic and Neurosurgery UCLA School of Medicine UCLA Spine Center, CA, USA)

**Minimally Invasive Spine Surgery Update** ..... 70  
(Cosponsored by Synthes Co.)

14 : 30 ~ 14 : 40                      **Break**      10min.

14 : 40 ~ 15 : 15 (35min.)

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## Spine Leader's Lecture B-1

Chairperson Yasushi Iwashita M.D.

**SLL-V**

**Jean Paul Steib, M.D.** (Professor, Department of Spinal Surgery Hip and Foot Surgery, Strasbourg University Hospital, Cedex, France)

**In situ contouring technique for spine surgery** ..... 86  
(Tokibo Co.)

15 : 15 ~ 15 : 40                      **Booth Viewing Time**      25min.

15 : 40 ~ 16 : 45 (65min.)

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## Main Theme 1-a < Spinal deformity-1 >

Chairpersons Shigeo Sano, M.D., Masashi Saitou, M.D.

**M1-a1**

**Surgical outcomes of posterior spinal fusion with PLIF for adult spinal deformity** ..... 104

Masayuki Ishikawa, M.D., et al.

(Spine and Spinal Cord Center, International University of Health and Welfare, Mita Hospital, Minato-ku, Tokyo)

**M1-a2**

**Spinal osteotomy using sublaminar wire or cable for kyphosis associated with osteoporosis** ..... 106

Hideo Hosoe, M.D., et al.

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

<b>M1-a3</b>	<b>Modified derotation correction maneuver for scoliosis</b> ..... 108 Masafumi Machida, M.D., et al. (Department of Orthopaedic Surgery, Murayama Medical Center, Higashimurayama, Tokyo)
<b>M1-a4</b>	<b>Pedicle subtraction osteotomy by multi-dimensional method for aged kyphoscoliosis</b> ..... 110 Hiromi Matsuzaki, M.D., et al. (Nihon University Research Center, Chiyoda-ku, Tokyo)
<b>M1-a5</b>	<b>Corrective spinal fixation by spinal instrumentation for degenerative lumbar scoliosis with a high deformity</b> ..... 112 Takeshi Uchida, M.D., et al. (Orthopedic, Takeshi Uchida Clinic, Kawasaki, Kanagawa)
<b>M1-a6</b>	<b>Dorsal ventral dorsal three stage correction surgery for lumbar kyphosis</b> ..... 114 Kazuyuki Otani, M.D., et al. (Department of Orthopaedic Surgery, Kudanzaka Hospital, Chiyoda-ku, Tokyo)
<b>M1-a7</b>	<b>A study of the correction angle and complications after correction of kyphosis using the method of PSO (Pedicle Subtraction Osteotomy)</b> ... 116 Yujiro Hirao, M.D., et al. (Department of Orthopaedic Surgery, Sanraku Hospital, Chiyoda-ku, Tokyo)

16 : 45 ~ 17 : 35 (50min.)

## Main Theme 4-a < Compressive myelopathy-1 >

Chairpersons Kimihiko Mii, M.D., Macondo Mochizuki, M.D.

<b>M4-a1</b>	<b>Diagnosis and treatment of cervical compression myelopathy mimicking intramedullary lesions</b> ..... 196 Minoru Hoshimaru, M.D., et al. (Department of Neurosurgery, Ohtsu Municipal Hospital, Ohtsu, Shiga)
<b>M4-a2</b>	<b>Selective anterior decompression and fusion for cervical OPLL</b> ..... 198 Atsuomi Aiba, M.D., et al. (Orthopedic Department, Numazu City Hospital, Numazu, Shizuoka)
<b>M4-a3</b>	<b>Technical important points in staged decompression surgery via posterior approach for thoracic OPLL</b> ..... 200 Shigeru Hirabayashi, M.D., et al. (Department of Orthopaedic Surgery, Teikyo University Hospital, Itabashi-ku, Tokyo)



18 : 35 ~ 18 : 50 (15min.)

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## Free Papers h < T-OYL >

Chairpersons Shigeru Hirabayashi, M.D.

*F-h1*

**A case of circumspinal decompression for thoracic myelopathy due to ossification of the posterior longitudinal ligament** ..... 300

Yosuke Kobayashi, M.D., et al.

(Orthopedic Department, Yokohama City University, Yokohama, Kanagawa)

*F-h2*

**Treatment of thoracic spine ligamentum flavum ossification associated with lumbar disease** ..... 302

Keishi Tsunoda, M.D., et al.

(Department of Neurosurgery, Nagasaki University Hospital, Nagasaki, Nagasaki)

18 : 50 ~ 19 : 00

**Break** 10min.

19 : 00 ~ 20 : 00

**Banquet (4th Floor 419)**





17 September (Fri.)

Main Hall 2

8 : 00 Registration

8 : 35 ~ 9 : 10 (35min.)

## Free Papers b 〈 L-Plasty 〉

Chairpersons Hitoshi Hase, M.D., Minoru Hoshimaru, M.D.

**F-b1**

Clinical outcome of spinous process splitting approach for lumbar spinal canal stenosis ..... 254

Aritetsu Kanemura, M.D., et al.

(Orthopaedic Department, Kobe Rosai Hospital, Kobe, Hyogo)

**F-b2**

Opposite side approach for facet cyst resection with preservation of facet joint ..... 256

Tatsuya Yasuda, M.D., et al.

(Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, Hamamatsu, Shizuoka)

**F-b3**

Microendoscopic lumbar decompression using a novel curved chisel..... 258

Shu Nakamura, M.D., et al.

(Department of Orthopaedic Surgery, Ito Orthopaedic & Internal Clinic, Niwa, Aichi)

**F-b4**

Yellow ligament floating method by unilateral approach for lumbar spinal canal stenosis ..... 260

Takashi Yamazaki, M.D., et al.

(Department of Orthopedics, Musashino Red Cross Hospital, Musashino, Tokyo)

## Main Theme 3-b 〈 MISS-2 〉

Chairpersons Yutaka Hiraizumi, M.D., Koji Sato, M.D.

*M3-b1*

**Facet cysts after hemi-laminotomy of lumbar spine** ..... 158  
Norihiko Minami, M.D., et al.  
(Orthopedic Department, Kashiwa City Hospital, Kashiwa, Chiba)

*M3-b2*

**Indication and efficacy of anterior foraminotomy for treatment of cervical radiculopathy** ..... 160  
Takahisa Kaneko, M.D., et al.  
(Department of Neurosurgery, Sapporo Medical University School of Medicine, Sapporo, Hokkaido)

*M3-b3*

**Recurrent canal stenosis from non-union of laminar hinges after muscle-preserving cervical double-door laminoplasty** ..... 162  
Yusuke Takeda, M.D., et al.  
(Orthopedic Department, Toranomon Hospital, Minato-ku, Tokyo)

*M3-b4*

**Delayed spinal cord paralysis after percutaneous vertebroplasty of osteoporotic vertebral fractures: A case report** ..... 164  
Takatoshi Shimomura, M.D., et al.  
(Neurosurgery Department, Ohtsu Municipal Hospital, Ohtsu, Shiga)

*M3-b5*

**A radiological evaluation about the postoperative instability for spinous process splitting method** ..... 166  
Masahiro Joko, M.D., et al.  
(Department of Neurological Surgery, Aichi Medical University, Aichi, Aichi)

*M3-b6*

**The influence of minimally invasive lumbar interbody fusion on the back muscles : evaluation by MRI and needle myography** ..... 168  
Takanori Saito, M.D., et al.  
(Orthopedic Department, Kansai Medical University Takii Hospital, Moriguchi, Osaka)

10 : 05 ~ 10 : 10

Break 5min.

## Main Theme 5-b < Video-2 >

Chairpersons Izumi Koyanagi, M.D., Motoo Kubota, M.D.

<b>M5-b1</b>	<b>Surgery of spinal intramedullary tumors: tumor exposure and dissection plane</b> ..... 224 Toshihiro Takami, M.D., et al. (Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)
<b>M5-b2</b>	<b>Surgery of spinal arteriovenous malformations: Intraoperative imaging support</b> ..... 226 Toshihiro Takami, M.D., et al. (Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)
<b>M5-b3</b>	<b>The use of split laminoplasty and plated bayonet in surgery of intramedullary spinal cord — tumors technical notes —</b> ..... 228 Masanori Ito, M.D., et al. (Department of Neurosurgery, Juntendo University Urayasu Hospital, Urayasu, Chiba)
<b>M5-b4</b>	<b>The arachnoid preservation technique for spinal intradural extramedullary tumor</b> ..... 230 Masaki Mizuno, M.D., et al. (Department of Spinal Surgery, Kameda Medical Center, Kamogawa, Chiba)
<b>M5-b5</b>	<b>Removal of the spinal cavernous angioma using operating microscope</b> ... 232 Kiyoshi Ito, M.D., et al. (Department of Neurosurgery, Shinshu University School of Medicine, Matsumoto, Nagano)
<b>M5-b6</b>	<b>Foramen magnum decompression with removal of the outer layer of the dura (Isu operation) for syringomyelia with Chiari type 1 malformation</b> ... 234 Hisasaki Uchikado, M.D., et al. (Department of Neurosurgery, Kurume University School of Medicine, Kurume, Fukuoka)

10 : 55 ~ 11 : 00                      Break      5min.

11 : 00 ~ 12 : 10      (Spine Leader's Lecture A at Main Hall 1)

12 : 10 ~ 12 : 20                      Break      10min.

12 : 20 ~ 13 : 20 (60min.)

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## Hands-on Session A

### ROOM

Main Hall 2  
(502)

Chairperson Takanori Saito, M.D.  
Percutaneous spine implant VIPER system and Seminar for  
minimally invasive spine stabilization  
by Koji Sato, M.D. (Johnson & Johnson Co. DePuy Spine)

511 · 512

Chairperson Shigeo Sano, M.D.  
Hybrid Type Spinal Stabilization and Fusion System (UFS  
system : Universal Fusion and Stabilization system) for the  
Treatment of Degenerative Lumbar Spinal Disease  
by Junichi Kunogi, M.D. (Century Medical Inc.)

411 · 412

Surgical techniques of the CPC-specific vertebroplasty for  
osteoporotic vertebral collapse — Knack & Pitfalls —  
by Ryuichi Takemasa, M.D. (Hoya, Co.)

413

Chairperson Daisuke Togawa, M.D.  
Percutaneous vertebral augmentations in acute osteoporotic  
vertebral fractures: Therapeutic role of "balloon-kyphoplasty"  
by Chun Kun Park, M.D., Ph.D. (Medtronic Sofamor-Danek Japan Co.)

13 : 20 ~ 13 : 30 Break 10min.

13 : 30 ~ 14 : 30 (Special Lecture I at Main Hall 1)

14 : 30 ~ 14 : 40 Break 10min.

14 : 40 ~ 15 : 35 (55min.)

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## Spine Leader's Lecture B-2

14 : 40 ~ 14 : 57 (17min.)

Chairperson Masashi Saitou, M.D.

**SLL-VI**

Eiji Abe, M.D. (Department of Orthopaedic Surgery, Akita Kumiai General  
Hospital, Akita, Akita)  
Correction of Degenerative Kypho-scoliosis(LDKS) by Multi-level  
Posterior Lumbar Interbody Fusion(PLIF)- Surgical Technique ..... 88  
(Japan Medical Dynamic Marketing, INC.)

14 : 57 ~ 15 : 14 (17min.)

Chairperson Hiromi Matsuzaki, M.D.

**SLL-VII**

Shigeo Sano, M.D. (Orthopaedic Department, Sanraku Hospital, Chiyodaku, Tokyo)

Pedicle Subtraction Osteotomy - Technique, Complication and Prevention ..... 90  
(JPSTSS)

15 : 14 ~ 15 : 31 (17min.)

Chairperson Ken Ishi, M.D.

**SLL-VIII**

Kenji Fukaya, M.D. (Department of Neurosurgery, Ayabe Renaiss Hospital, Ayabe, Kyoto)

Experience of percutaneous pedicle screwing for osteoporotic vertebra using Tetracalcium Phosphate Cement (PRIMAFIX®) ..... 92  
(Japan MDM Inc.)

15 : 35 ~ 15 : 45

Break 10min.

15 : 45 ~ 16 : 20 (35min.)

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## Free Papers c < C-Plasty >

Chairpersons Youichi Aota, M.D., Masato Hara, M.D.

**F-c1**

Dome-like expansion of the caudal half of the lamina for cervical spondylotic myelopathy to minimize damage to posterior extensor mechanism of the cervical spine ..... 262

Ryoma Aoyama, M.D., et al.

(Orthopedic Department, Tokyo Dental College Ichikawa General Hospital, Ichikawa, Chiba)

**F-c2**

Development of Multi-Spacer for using multi spinal levels laminoplasty ... 264

Shun-Ichi Kihara, M.D., et al.

(Department of Neurosurgery, Ohtsu Municipal Hospital, Ohtsu, Shiga)

**F-c3**

Simultaneous cervical and thoracic surgery for combined cervical stenosis and thoracic ossified yellow ligament as a cause of spastic gait disturbance ..... 266

Yoshifumi Kawanabe, M.D., et al.

(Department of Neurosurgery, Ohtsu Municipal Hospital, Ohtsu, Shiga)

**F-c4**

**New threads that can be passed easily through the laminae in double-door laminoplasty** ..... 268

Tsukasa Nishiura, M.D., et al.

(Department of Neurosurgery, National Hospital Organization Iwakuni Clinical Center, Iwakuni, Yamaguchi)

16 : 20 ~ 16 : 55 (35min.)

## Free Papers e < C-PS >

Chairpersons Masashi Neo, M.D., Tatsuo Takahashi, M.D.

**F-e1**

**Study on cervical pedicle screw displacement in CT-based navigation system** ..... 274

Shiro Imagama, M.D., et al.

(Department of Orthopaedic Surgery, Nagoya University, Nagoya, Aichi)

**F-e2**

**My own invention for the insertion point of cervical pedicle screw** ... 276

Akira Itoi, M.D., et al.

(Orthopaedic Surgery, Juntendo University Shizuoka Hospital, Izunokuni, Shizuoka)

**F-c3**

**Two cases of laminar screw fixation in the lower cervical spine** ..... 278

Hironori Tanabe, M.D., et al.

(Orthopedic Department, Yokohama City University, Yokohama, Kanagawa)

**F-c4**

**The usefulness of double C-arms in the percutaneous transpedicular approach**..... 280

Masayuki Nakahar, M.D., et al.

(Department of Spine Surgery, Shinkomonji Hospital, Kitakyushu, Fukuoka)

16 : 55 ~ 17 : 30 (35min.)

## Free Papers g < ACF >

Chairpersons Masanori Ito, M.D., Hideo Hosoe, M.D.

**F-g1**

**Usefulness of posterior spinous process plate fixation in addition to long anterior cervical fusion — To avoid halo-vest immobilization —** ..... 292

Kei Watanabe, M.D., et al.

(Department of Orthopaedic Surgery, Osaka Red Cross Hospital, Osaka, Osaka)

**F-g2**

**Finite element analysis (FEA) of subsidence of cervical cages after anterior cervical interbody fusion surgery** ..... 294

Hiroyuki Takahashi, M.D., et al.  
(Hisada Computational Biomechanics Laboratory, The University of Tokyo, Bunkyo-ku, Tokyo)

**F-g3**

**A small experience of the surgical treatment for cervical kyphosis due to congenital chondrodysplasia** ..... 296

Takeshi Takenouchi, M.D., et al.  
(Department of Orthopaedic Surgery, Kagoshima Graduate School of Medical and Dental Sciences, Kagoshima, Kagoshima)

**F-g4**

**Cervical locked facet: analysis of 8 cases** ..... 298

Masahiko Akiyama, M.D., et al.  
(Division of Neurosurgery, Fuji City General Hospital, Fuji, Shizuoka)

17 : 30 ~ 17 : 40

Break 10min.

17 : 40 ~ 18 : 50 (70min.)

## Free Papers a < C1/C2 >

Chairpersons Naoki Asami, M.D., Masashi Neo, M.D.

**F-a1**

**Posterior instrumented C1-2 fusion: complication avoidance and management** ..... 236

Toru Yamagata, M.D., et al.  
(Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)

**F-a2**

**Utility of wiring with local anesthesia for cervical dislocation fracture (Allen DF type)** ..... 238

Akira Itoi, M.D., et al.  
(Orthopaedic Surgery, Juntendo University Shizuoka Hospital, Izunokuni, Shizuoka)

**F-a3**

**Cervical schwannoma of C1/2 in three operative cases** ..... 240

Tatsuya Tanaka, M.D., et al.  
(Department of Neurosurgery, Arita Kyoritsu Hospital, Nishimatsuura, Saga)

**F-a4**

**C1-2 rigid posterior fusion using intra-articular spacer** ..... 242

Naoki Asami, M.D.  
(Spine Surgery Ikeda hospital, Kobayashi, Miyazaki)

*F-a5*

**Surgical result of FMD for Chiari malformation: a retrospective study on re-operation cases**..... 244

Motoo Kubota, M.D., et al.  
(Department of Spinal Surgery, Kameda Medical Center, Kamogawa, Chiba)

*F-a6*

**Reinforcement of a C2 laminar screw with a C2 laminar hook** ..... 246

Masashi Neo, M.D., et al.  
(Department of Orthopaedic Surgery, Graduate School of Medicine, Kyoto University, Kyoto, Kyoto)

*F-a7*

**The surgical outcome for the treatment of Chiari malformation type 1 with or without syringomyelia** ..... 248

Tomohiro Murakami, M.D., et al.  
(Department of Neurosurgery, Sapporo Medical University School of Medicine, Sapporo, Hokkaido)

*F-a8*

**Atlantoaxial fixation using C1 lateral mass screw** ..... 250

Hironobu Watanabe, M.D., et al.  
(Keiyu Spine Center, Keiyu Orthopedic Hospital, Tatebayashi, Gunma)

*F-a9*

**The surgical management of upper cervical fracture & dislocation in Hochimin City, Vietnam** ..... 252

Von Van Thanh, M.D.  
(Spinal Surgery Department A, Hospital for Trauma-Orthopedics Hochimin City, Vietnam)

18 : 50 ~ 19 : 00

**Break 10min.**

19 : 00 ~ 20 : 00

**Banquet (4th Floor 419)**





18 September (Sat.)

Main Hall 1

8 : 30 Registration

9 : 00 ~ 9 : 40 (40min.)

## Main Theme 1-b 〈 Spinal deformity-2 〉

Chairpersons Osamu Nakai, M.D., Futoshi Suetsuna, M.D.

**M1-b1**

Posterior cervical surgery for cervical spondylotic myelopathy associated with athetoid cerebral palsy ..... 118  
Nobuyuki Shimokawa, M.D., et al.  
(Department of Neurosurgery, Tsukazaki Hospital, Himeji, Hyogo)

**M1-b2**

Long fusion to the sacrum ..... 120  
Tetsuya Ohara, M.D., et al.  
(Orthopaedic Surgery and Spine Center, Meijo Hospital, Nagoya, Aichi)

**M1-b3**

Complications and indications of posterior lumbosacral fixation with iliac screws ..... 122  
Juichi Tonosu, M.D., et al.  
(Department of Orthopaedic Surgery, Kanto Rousai Hospital, Kawasaki, Kanagawa)

**M1-b4**

Posterolateral lumbar interbody fusion (PLIF) combined with indirect claw fixation and dynamization rod for the treatment of osteoporotic vertebral collapse in aged patients ..... 124  
Masayuki Ishihara, M.D., et al.  
(Department of Orthopedic Surgery, Kansai Medical University Takii Hospital, Moriguchi, Osaka)

9 : 40 ~ 9 : 55 (15min.)

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## Free Papers i < Monitoring >

Chairpersons Masafumi Machida, M.D.

**F-i1**

**Intraoperative spinal cord monitoring using double-train transcranial electrical stimulation** ..... 304

Sho Kobayashi, M.D., et al.

(Department of Orthopedic Surgery, Hamamatsu University School of Medicine,  
Hamamatsu, Shizuoka)

**F-i2**

**Intraoperative MEP for lumbar surgery** ..... 306

Muneyoshi Yasuda, M.D., et al.

(Department of Neurological Surgery, Aichi Medical University, Aichi, Aichi)

9 : 55 ~ 10 : 05

Break 10min.

10 : 05 ~ 10 : 22 (17min.)

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## Spine Leader's Lecture C-1

Chairperson Takanori Saito, M.D.

**SLL-IX**

Ken Ishii, M.D.

(Department of Orthopaedic Surgery, School of Medicine, Keio University, Shinjuku-ku, Tokyo)

**New challenges in MIS-TLIF with the aim of safe spread** ..... 94

(Biomet Japan, Co.)

10 : 25 ~ 10 : 30

Break 5min.

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

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## Special Lecture II

Chairpersons Shigeo Sano, M.D.

**SL-II**

**Wun-Jer Shen, M.D.** (Vice Director and Chief of Spine Section, Po-Cheng Orthopaedic Institute Kaohsiung, Kaohsiung, Taiwan)

**The effectiveness of corrective spinal fusion for spinal deformity** ... 72

(JPSTSS)

11 : 15 ~ 11 : 20

Break 5min.

11 : 20 ~ 12 : 30 (70min.)

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

11 : 20 ~ 11 : 37 (17min.)

Chairperson Masahiro Kanayama, M.D.

**SLL-XI**

**Yasushi Sugawara, M.D.** (Department of Plastic Surgery, Jichi Medical University, Shimotsuke, Tochigi)

**Seeking wound closure best practice** ..... 96  
(Johnson & Johnson Co. Ethicon)

11 : 37 ~ 11 : 54 (17min.)

Chairperson Ken Ishii, M.D.

**SLL-XII**

**Jeffrey C. Wang, M.D.** (Professor of Orthopedic and Neurosurgery UCLA School of Medicine UCLA Spine Center, CA, USA)

**Dynamic MRI for spinal disorders** ..... 98  
(Synthes Co.)

11 : 54 ~ 12 : 11 (17min.)

Chairperson Futoshi Suetsuna, M.D.

**SLL-XIII**

**Shigeo Sano, M.D.** (Orthopedic Department, Sanraku Hospital, Chiyoda-ku, Tokyo)

**Technique and results of the Corrective TLIF/PLIF in lumbar spinal canal stenosis with deformity** ..... 100  
(Peter Brehm Japan Inc.)

12 : 11 ~ 12 : 28 (17min.)

Chairperson Hiromi Matsuzaki, M.D.

**SLL-XIV**

**John P. Kostuik, M.D.** (Prof. Emeritus Dept. Orthopaedics/Neurosurgery Johns Hopkins University, VA, USA)

**Innovative Zero-torque, Low Profile Fixation in the Treatment of Spinal Deformity** ..... 102  
(Surgical Spine Inc.)

12 : 30 ~ 12 : 40                      Break    10min.

12 : 40 ~ 13 : 40                      (Hands-on Session B    66 page)

13 : 40 ~ 13 : 50                      Break    10min.

13 : 50 ~ 14 : 05 (15min.)

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## General Assembly (Report of board meeting and finance)

President Takeshi Uchida, M.D.

## Announcement of President-elect

Masanori Ito, M.D.

14 : 05 ~ 14 : 20 (15min.)

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## The First Prize Winner at the 14<sup>th</sup> International ArgoSpine Symposium 2010

Chairperson Shigeo Sano, M.D.

**WL**

Angel Escamez-Perez, M.D. (Orthopaedic Dept. Spine Section, Hospital  
dela Vega Lorenzo Buirao, Spain)  
Burst Fracture after an Extreme Lateral Interbody Fusion (XLIF) in a L4-  
L5 Spondylolisthesis ..... 76  
(Showa Ika Kogyo Co. Ltd.)

14 : 20 ~ 15 : 20 (60min.)

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## Special Lecture III (Postgraduate Lecture of JOA)

Chairpersons Youichi Shimada, M.D.

**SL-III**

Jeffrey B. Neustadt, M.D. (University of South Florida College of Medicine,  
Affiliate associate Professor, Department of Surgery and Pediatrics, Florida, USA)  
Past, Present, and Future for Treating Lumbar Scoliosis ..... 74  
(Cosponsored by Alphatec Pacific, INC.)

15 : 20 ~ 15 : 30

Break 10min.

15 : 30 ~ 16 : 10 (40min.)

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## Main Theme 2-b < LBP-2 >

Chairpersons Masatoshi Sumi, M.D., Motoo Kubota, M.D.

**M2-b1**

The clinical feature and results of PLIF in patients with low back pain  
and getting up stiffness ..... 138  
Yuichiro Nishijima, M.D.

(Nishijima Spine Clinic, Chofu, Tokyo)

<b>M2-b2</b>	<b>Percutaneous lumbar disc disectomy (PLDD) with Disc-FX system</b> ... 140 Koki Anabuki, M.D., et al. (Anabuki Orthopedic Clinic, Susono, Shizuoka)
<b>M2-b3</b>	<b>Analysis of 40 cases of vertebroplasty used with Biopex (calcium phosphate) for a relief of the pain due to osteoporotic compressed fracture</b> ..... 142 Nobuaki Momosaki, M.D., et al. (Arita Kyoritsu Hospital, Department of Neurosurgery, Nishimatsuura, Saga)
<b>M2-b4</b>	<b>Percutaneous vertebroplasty (PVP) with the autograft technique for non-union cases of osteoporotic vertebral fracture</b> ..... 144 Shinjiro Tomita, M.D., et al. (Orthopedic Department, Nagasaki Kamitomachi Hospital, Nagasaki, Nagasaki)

16 : 10 ~ 16 : 50 (40min.)

---

## Main Theme 4-b < Compressive myelopathy-2 >

Chairpersons Tateru Shiraishi, M.D., Syun-ichi Kihara, M.D.

<b>M4-b1</b>	<b>Unilateral open-door laminoplasty with titanium screws and miniplates through hydroxyapatite spacers</b> ..... 206 Satoshi Tanaka, M.D., et al. (Department of Neurosurgery, Kensei General Hospital, Sakuragawa, Ibaraki)
<b>M4-b2</b>	<b>Facet screw placement in the subaxial cervical spine: Computed tomographic evaluation for safety and efficacy of two screwing methods</b> ..... 208 Yoichi Aota, M.D., et al. (Orthopedic Department, Yokohama City University, Yokohama, Kanagawa)
<b>M4-b3</b>	<b>Cervical myelopathy with severe cervical kyphosis treated by 360 degrees spinal fusion — A case report</b> ..... 210 Hideo Hosoe, M.D., et al. (Orthopaedic Department, Gifu Prefectural General Medical Center, Gifu, Gifu)
<b>M4-b4</b>	<b>Circumspinal decompression with dekyphosis stabilization for thoracic myelopathy due to OPLL</b> ..... 212 Norio Kawahara, M.D., et al. (Department of Orthopaedic Surgery, Kanazawa Medical University, Kahoku, Ishikawa)

16 : 50 ~ 17 : 00

**Break** 10min.

17 : 00 ~ 17 : 40 (40min.)

## Free Papers f < PLIF >

Chairpersons Jyunichi Kunogi, M.D., Naoki Asami, M.D.

*F-f1*

**Packing technique of massive bone graft in PLIF/TLIF** ..... 282

Naohiro Kawamura, M.D., et al.

(Orthopaedic Department, Sanraku Hospital, Chiyoda-ku, Tokyo)

*F-f2*

**Is the simultaneous decompression surgery at L3/4 effective for symptomatic ASD after L4/5 PLIF ?** ..... 284

Tomohiro Hikata, M.D., et al.

(Orthopaedic Department, Keiyu Hospital, Yokohama, Kanagawa)

*F-f3*

**Strategy for salvage pedicle screw placement** ..... 286

Shunsuke Fujibayashi, M.D., et al.

(Department of Orthopaedic Surgery, Graduate School of Medicine, Kyoto University, Kyoto, Kyoto)

*F-f4*

**Posteolateral fixation with transverse connector via paramedian interfascial approach for thoracolumbar burst fracture** ..... 288

Tetsuryu Mitsuyama, M.D., et al.

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

*F-f5*

**A case of lumbar juxta-facet cyst in a aged patient treated by surgery with facet joint screw fixation** ..... 290

Masahito Yuzurihara, M.D., et al.

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

17 : 40 ~ 17 : 45

~ Closing Remarks ~

President Takeshi Uchida, M.D.

(Please understand the content of the program may be changed on the day.)



18 September (Sat.)

Main Hall 2

8 : 30 Registration

9 : 00 ~ 9 : 55 (55min.)

## Main Theme 3-c 〈 MISS-3 〉

Chairpersons Yuuichirou Nishijima, M.D., Nobuyuki Shimokawa, M.D.

**M3-c1**

**Decompressive surgery without fusion for cervical and lumbar radiculopathy** ..... 170

Masahito Hara, M.D., et al.

(Department of Neurosurgery, Nagoya University Graduate School of Medicine, Nagoya, Aichi)

**M3-c2**

**Accident and pitfall for percutaneous vertebroplasty with bone-cement, and suggestion** ..... 172

Michinori Yamashita, M.D., et al.

(Department of Orthopaedic Surgery, Nishijima Hospital, Numazu, Shizuoka)

**M3-c3**

**Retrojugular approach for anterior cervical keyhole surgery** ..... 174

Masaaki Nakajima, M.D., et al.

(Department of Neurosurgery, Okayama Saiseikai General Hospital, Okayama, Okayama)

**M3-c4**

**Cervical operation using percutaneous endoscopic discectomy (PED) system** ..... 176

Sumito Shimizu, M.D., et al.

(Spine and Spinal Cord Center, Omigawa General Hospital, Katori, Chiba)

**M3-c5**

**Anterior discectomy of thoracic disc herniation by percutaneous endoscopic discectomy (VATS-PED)** ..... 178

Sumito Shimizu, M.D., et al.

(Spine and Spinal Cord Center, Omigawa General Hospital, Katori, Chiba)

**M3-c6**

**Surgical technique of PELD for lumbar disc herniation** ..... 180

Kiyoshi Yoshihara, M.D.

(Orthopedic Department, Sangenjaya Daiichi Hospital, Setagaya-ku, Tokyo)





13 : 50 ~ 14 : 05 (General Assembly at Main Hall 1)  
 14 : 05 ~ 14 : 20 (The First Prize Winner Lecture at Main Hall 1)  
 14 : 20 ~ 15 : 20 (Special Lecture III at Main Hall 1)  
 15 : 20 ~ 15 : 30 Break 10min.

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

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## Main Theme 3-d < MISS-4 >

Chairpersons Yutaka Hiraizumi, M.D., Ken Ishii, M.D.

<b>M3-d1</b>	<p><b>New approaching method (SPICS) in microendoscopic lumbar decompression</b> ..... 182</p> <p style="margin-left: 20px;">Shu Nakamura, M.D., et al.          (Department of Orthopedic Surgery, Ito Orthopedic &amp; Internal Clinic, Niwa, Aichi)</p>
<b>M3-d2</b>	<p><b>The microscopic translaminar approach to lumbar disc herniation</b> ... 184</p> <p style="margin-left: 20px;">Masayoshi Ohi, M.D., et al.          (Fuji Toranomon Orthopaedic Hospital, Spine Center, Gotemba, Shizuoka)</p>
<b>M3-d3</b>	<p><b>Lumbar discectomy using muscle-preserving interlaminar decompression (MILD) approach</b> ..... 186</p> <p style="margin-left: 20px;">Yoichiro Hatta, M.D., et al.          (Department of Orthopaedic Surgery, Japanese Red Cross Kyoto Daini Hospital, Kyoto, Kyoto)</p>
<b>M3-d4</b>	<p><b>Newly developed minimally invasive lumbar disc percutaneous nucleotomy (Dekompressor) our preliminary results</b> ..... 188</p> <p style="margin-left: 20px;">Toru Koizumi, M.D., et al.          (Department of Neurosurgery, Ohtsu Municipal Hospital, Ohtsu, Shiga)</p>
<b>M3-d5</b>	<p><b>Surgeon radiation exposure in minimally invasive transtoraminal lumbar interbody fusion</b> ..... 190</p> <p style="margin-left: 20px;">Haruki Funao, M.D., et al.          (Department of Orthopedic Surgery, Nerima General Hospital, Nerima-ku, Tokyo)</p>
<b>M3-d6</b>	<p><b>Early complications of unilateral laminotomy for lumbar canal stenosis; analysis of risk factors in 100 consecutive cases</b> ..... 192</p> <p style="margin-left: 20px;">Dong Yeob Lee, M.D., et al.          (Department of Neurosurgery, Wooridul Spine Hospital, Seoul, R.O.K., Seoul, Korea)</p>

M3-d7

Perioperative complications of sing-level instrumented mini-open transforaminal lumbar interbody fusion for degenerative spondylolisthesis: analysis of risk factors in consecutive 207 patients ..... 194

Dong Yeob Lee, M.D., et al.

(Department of Neurosurgery, Wooridul Spine Hospital, Seoul, R.O.K., Seoul, Korea)

16 : 35 ~ 16 : 45

Break 10min.

16 : 45 ~ 17 : 25 (40min.)

## Free Papers j < Tumors etc. >

Chairpersons Masanori Ito, M.D., Takashi Yamazaki, M.D.

F-j1

Outcome of surgical treatments for metastatic spinal tumors ..... 308

Taketoshi Kushida, M.D., et al.

(Department of Orthopaedic Surgery, Kansai Medical University, Hirakata Hospital, Hirakata, Osaka)

F-j2

Two cases of spinal epidural cyst ..... 310

Akihide Kanazawa, M.D., et al.

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

F-j3

Surgical treatment for spondylitis and discitis ..... 312

Akira Kamijo, M.D., et al.

(Department of Orthopaedic Surgery, Kantoh Rousai Hospital, Kawasaki, Kanagawa)

F-j4

3-dimentional images of spinal arteriovenous malformation ..... 314

Keisuke Takai, M.D., et al.

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

F-j5

Two cases of thoracic hemangioblastoma with difficulty of diagnosis... 316

Tomohiko Hasegawa, M.D., et al.

(Department of Orthopaedic Surgery, Hamamatsu University School of Medicine, Hamamatsu, Shizuoka)

17 : 25 ~ 17 : 40

Break 15min.

17 : 40 ~ 17 : 45

(Closing Remarks at Main Hall 1)

(Please understand the content of the program may be changed on the day.)