

# The 16th Annual Meeting of Japan Society for the Study of Surgical Technique for Spine and Spinal Nerves (JPSSSTSS)

●Program●

11 ~ 12 September 2009



11 September (Fri.)

8 : 00 Registration

8 : 25 ~ 8 : 30

Main Hall 1 (Cosmos 1)

~ Opening Remarks ~

President Shigeo Sano, M.D.

8 : 30 ~ 9 : 10 (40min.)

Main Hall 1 (Cosmos 1)

## Main Theme 1-A

〈 Spinal canal stenosis with spondylolisthesis 〉

Chairpersons Yuichiro Nishijima, M.D. Masanori Ito, M.D.

1

Clinical results of the lumbar decompression for three level involvements  
— a comparative study between the bilateral decompression through a  
unilateral approach and the fenestration — ..... 77

Hiroshi Takei, M.D., et al.

(Department of Orthopaedic Surgery, Yamagata University, School of Medicine, Yamagata,  
Yamagata)

2

**Optimal surgical treatment for degenerative lumbar spondylolisthesis** ..... 79

Hidetoshi Murata, M.D., et al.

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

Guest  
Speaker

**Clinical results of microendoscopic laminotomy for lumbar degenerative spondylolisthesis**

Munehito Yoshida, M.D.

(Department of Orthopaedic Surgery, Wakayama Medical University, Wakayama, Wakayama)

Guest  
Speaker

**Myoarchitectonic Spinoplasty for Lumbar Stenosis and Listhesis**

Phyo Kim, M.D.

(Neurosurgery, Dokkyo University School of Medicine, Shimotsuga, Tochigi)

Guest  
Speaker

**Lumbar Canal Enlargement for Degenerative Spondylolisthesis**

Hirotsugu Oda, M.D.

(Shunan City Shinnnanyo Hospital, Shunan, Yamaguchi)

Guest  
Speaker

**Technique and results of the decompression correction fusion for a degenerative spondylolisthesis with spinal canal stenosis**

Shigeo Sano, M.D.

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

8 : 30 ~ 9 : 20 (50min.)

**Main Hall 2** (Cosmos 2)

**Free Papers 5-D**  
**< Upper cervical spine >**

Chairpersons Naoki Asaimi, M.D. Hisaaki Uchikado, M.D.

3

**A case of congenital osteodysplasty with atlanto-axial dislocation surgical management report** ..... 81

Yasuomi Nonaka, M.D., et al.

(Department of Neurosurgery, Juntendo University Urayasu Hospital, Urayasu, Chiba)

4

**A case of synovial cyst at atlanto-axial joint** ..... 83

Eiichro Honda, M.D., et al.

(Department of Neurosurgery, Shiroishikyouritsu Hospital, Kijima, Saga)

5

**Tricks of C1 lateral mass exposure** ..... 85

Masahiko Akiyama, M.D., et al.

(Division of Neurosurgery, Fuji City General Hospital, Fuji, Schizuoka)

6

**A case of atlas burst fracture with tranverse lateral mass fracture** ... 87

Takashi Kobayashi, M.D., et al.

(Orthopedic Department, Akita Kumiai General Hospital, Akita, Akita)

7

**Our experience of twenty four cases of posterior cervical fixation using C1 lateral mass screw** ..... 89

Nobuyuki Shimokawa, M.D., et al.

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

8

**C2 pedicle screw fixation for traumatic axis spondylolisthesis** ..... 91

Hisaaki Uchikado, M.D., et al.

(Department of Neurosurgery, Kurume University School of Medicine, Kurume, Fukuoka)

9

**C1-2 junction Jack-up method for vertical sublaxation** ..... 93

Naoki Asami, M.D., et al.

(Sanwakai Ikeda Hospital Spine Division, Kobayashi, Miyazaki)

9 : 10 ~ 10 : 00 (50min.)

Main Hall 1 (Cosmos 1)

### Main Theme 1-B

#### < Spinal canal stenosis with degenerative lumbar scoliosis >

Chairpersons Kiyoshi Kumano, M.D. Masashi Saitou, M.D.

10

**Concave PLIF at the wedged disc below and above the caudal end vertebra for degenerative lumbar scoliosis. A minimum 5-year follow-up** ..... 95

Tomoaki Toyone, M.D., et al.

(Department of Orthopaedic Surgery, Teikyo University Chiba Medical Center, Ichihara, Chiba)

11

**Surgical management of lumbar degenerative scoliosis** ..... 97

Hideki Ohta, M.D., et al.

(Department of Orthopedic, Oita Orthopedic Hospital, Oita, Oita)

12

**Clinical results of muscle-preserving interlaminar decompression (MILD) for lumbar spinal canal stenosis with degenerative lumbar scoliosis** ... 99

Kenzo Koyama, M.D., et al.

(Department of Orthopaedics, Matsushita Memorial Hospital, Moriguchi, Osaka)

13

**PLIF for severe degenerative lumbar scoliosis** ..... 101

Akiyoshi Yamazaki, M.D., et al.

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

14

**Corrective spinal fusion using spinal instrumentation for degenerative lumbar scoliosis over 25 degree of Cobb angle** ..... 103

Takeshi Uchida, M.D., et al.

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

15

**Comparison between one-staged posterior approach versus combined approach for lumbar degenerative scoliosis** ..... 104

Cédric Barrey, M.D., et al.

(Hôpital Neurologique et Neurochirurgical Pierre WERTHEIMER Service de Neurochirurgie C  
Groupement Hospitalier Est, Lyon cedex, France)

9 : 20 ~ 9 : 50 (30min.)

Main Hall 2 (Cosmos 2)

## Free Papers 5-E

### < Decompression in cervical spine >

Chairpersons Shigeru Hirabayashi, M.D.

16

**Osteoplastic vertebrotoomy for cervical ossification of posterior longitudinal ligament** ..... 107

Shinnosuke Hattori, M.D., et al.

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

17

**Modified open-door laminoplasty with ceramic spacer and suture anchor fixation for cervical myelopathy** ..... 109

Tomoyuki Ozawa, M.D., et al.

(Department of Orthopaedic Surgery, Teikyo University Chiba Medical Center, Ichihara, Chiba)

18

**Initial surgical outcomes of less invasive cervical laminoplasty(K-method) performed by one surgeon** ..... 111

Shuntaro Tsuchida, M.D., et al.

(Spine Center, Fuji Toranomon Orthopaedic Hospital, Gotenba, Shizuoka)

19

**C4-C6 Laminoplasty to preserve the C2 and C7 spinous process without detaching muscles** ..... 113

Tomoaki Toyone, M.D., et al.

(Department of Orthopaedic Surgery, Teikyo University Chiba Medical Center, Ichihara, Chiba)

9 : 50 ~ 10 : 20 (30min.)

---

Main Hall 2 (Cosmos 2)

## Free Papers 5-A 〈 Tumors -Vascular〉

Chairpersons Eiichro Honda, M.D.

20

**Surgical obliteration of spinal arteriovenous fistulas: Surgical safety and radical cure** ..... 115

Toshihiro Takami, M.D., et al.

(Department of Neurosurgery, Osaka City University Graduate School of Medicine,  
Osaka, Osaka)

21

**Surgical resection of spinal intradural cavernomas** ..... 117

Minoru Hoshimaru, M.D., et al.

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

22

**Usefulness of intraoperative indocyanine green videoangiography for spinal vascular lesions** ..... 119

Tomohiro Murakami, M.D., et al.

(Department of Neurosurgery, Sapporo Medical University, School of Medicine, Sapporo,  
Hokkaido)

23

**Case report: Hemangioma of spine treated by PVP** ..... 121

Toru Koizumi, M.D., et al.

(Shin Yokohama Spine Clinic, Yokohama, Kanagawa)

10 : 00 ~ 10 : 20 (20min.)

---

Main Hall 1 (Cosmos 1)

## Main Theme 1-C 〈 Spinal canal stenosis with kyphosis〉

Chairpersons Osamu Nakai, M.D.

24

**Correction surgery for lumbar kyphosis -A comparison study of dorsal ventral dorsal three stage correction and posterior closing osteotomy-** ..... 123

Kazuyuki Otani, M.D., et al.

(Department of Orthopaedic Surgery, Kudanzaka Hospital, Chiyoda-ku, Tokyo)

**Usefulness of PSO (Pedicicle Subtraction Osteotomy) for correction of severe kyphosis-A study of the correction angle- ..... 125**

Ryuta Kono, M.D., et al.

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

10 : 20 ~ 10 : 25

**Stretch Break 5min.**

10 : 25 ~ 10 : 55 (30min.)

Main Hall 1 (Cosmos 1)

## Guest Lecture

Chairperson Shigeo Sano, M.D.

### Fusion versus arthroplasty

John P. Kostuik., M.D. (Former Chief, Spine Division Professor, The Johns Hopkins Hospital, USA)

10 : 55 ~ 11 : 55 (60min.)

Main Hall 1 (Cosmos 1)

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

10 : 55 ~ 11 : 10 (15min.)

Chairperson Yoichi Aota, M.D.

- I John G. Heller, M.D.** (Dept. of Orthopedic Surgery, The Emory Spine Center)  
**Current Techniques for Posterior Cervical Reconstruction**  
 (Medtronic Sofamoa-Danek Japan Co.)

11 : 10 ~ 11 : 25 (15min.)

Chairperson Minoru Hoshimaru, M.D.

- II Stefan-Nikolaus Kroppenstedt, M.D.** (Assistant medical director, Campus Virchow-Klinikum, Charite University, Berlin, Germany)  
**Practical aspects of anterior and posterior cervical fixation ..... 126**  
 (B, Braun Aesclup Japan, Co.)

11 : 25 ~ 11 : 40 (15min.)

Chairperson Koji Sato, M.D.

- III Yue Wai Mun, M.D.** (Associate Consultant, Spine Service, Department of Orthopaedic Surgery, Singapore General Hospital, Outram Road, Singapore)  
**MIS TLIF with the viper System - Indication, Surgical Technique and Clinical Results, Study Design. Prospective Study ..... 128**  
 (Johnson & Johnson Co.)

11 : 40 ~ 11 : 55 (15min.)

Chairperson Tomoaki Toyone, M.D.

**IV Cédric Barrey, M.D.** (Hôpital Neurologique et Neurochirurgical Pierre WERTHEIMER Service de Neurochirurgie C Groupement Hospitalier Est, Lyon cedex, France)

**Biomechanical review of screw-based posterior dynamic stabilization devices** ..... 130  
(Senko Medical Instrument Mfg. Co.)

11 : 55 ~ 12 : 05                      **Transfer**              10min.

12 : 05 ~ 13 : 05 (60min.)

---

(Cosmos 1, Room 607 · 608, Room 601)

## Hands-on Session A

### ROOM

**Cosmos 1**

Chairperson Yoichi Aota, M.D.

**Current Techniques for Posterior Cervical Reconstruction**

by John G. Heller, M.D. (Medtronic Sofamoa-Danek Japan Co.)

**607 · 608**

Chairperson Minoru Hoshimaru, M.D.

**Practical aspects of anterior and posterior cervical fixation**

by Stefan-Nikolaus Kroppenstedt, M.D. (B, Braun Aesculap Japan, Co.)

**601**

Chairperson Koji Sato, M.D.

**MIS TLIF with the Viper System - Indication, Surgical Technique and Clinical Result**

by Yue Wai Mun, M.D. (Johnson & Johnson Co.)

13 : 05 ~ 13 : 15                      **Transfer**              10min.

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

---

Main Hall 1 (Cosmos 1)

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

**President** Shigeo Sano, M.D.

## Announcement of President-elect

Takeshi Uchida, M.D. (Spinal Surgery, Kanto Rosai Hospital)

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

---

Main Hall 1 (Cosmos 1)

## Special Lecture I (Postgraduate Lecture of JOA)

Chairpersons Shigeo Sano, M.D.

**Christian Mazel, M.D.** (Department of Orthopedic Surgery, Institut Mutualiste Montsouris, Paris, France)

**Management of spinal stenosis associated to spinal deformity** ... 132  
(Cosponsored by Tokibo Co.)

14 : 15 ~ 15 : 00 (45min.)

---

Main Hall 1 (Cosmos 1)

## Special Lecture II (Postgraduate Lecture of JOA)

Chairperson Yutaka Hiraizumi, M.D.

**David Polly Jr., M.D.** (Department of Orthopedic Surgery, University of Minnesota)

**Improving the Accuracy of Surgery : Pedicle Screw Placement as a Model**  
(Cosponsored by Medtronic Sofamoa-Danek Japan Co.)

Main Hall 1 (Cosmos 1)

15 : 00 ~ 15 : 10                      **Coffee Break**                      10min.

**Main Hall 2** (Cosmos 2)

15 : 00 ~ 15 : 05                      **Stretch Break**                      5min.

15 : 05 ~ 15 : 55 (50min.)

---

**Main Hall 2** (Cosmos 2)

## Free Papers 5-G < Instrumentation >

Chairpersons Hideo Hosoe, M.D. Nobuyuki Shimokawa, M.D.

26

**Surgical results of posterior fusion reinforced with sublaminar wiring connected to the cross link using polyethylene tape for osteoporotic vertebral collapse** ..... 135

Takafumi Maeno, M.D., et al.

(Department of Orthopaedic Surgery, Osaka City General Hospital, Osaka, Osaka)



27

The selection of anchor for posterior cervical fixation ..... 137

Nobuyuki Shimokawa, M.D., et al.

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

28

Reduction and fixation for the lumbar spondylolisthesis with S4 Spondylolisthesis Reduction Instrument (SRI) ..... 139

Yasushi Iwashita, M.D., et al.

(Department of Orthopaedic Surgery, National Hospital Organization Utano National Hospital, Kyoto, Kyoto)

29

Technique and results of "Meshplating", a method of spondylolysis repair for spondylolysis and spondylolytic spondylolisthesis ..... 141

Juichi Tonosu, M.D., et al.

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

30

Development of new spinal instrumentation for Asian peoples and clinical results in our hospital ..... 143

Takeshi Uchida, M.D., et al.

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

31

Advantages of paraspinal approach for S1 pedicle screw placement ..... 145

Masato Ota, M.D., et al.

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

32

Correction with hook system in idiopathic scoliosis with narrow pedicle ..... 147

Shingo Iizuka, M.D., et al.

(Department of Orthopaedic Surgery, National Hospital Organization Murayama Medical Center, Musashimurayama, Tokyo)

15 : 10 ~ 16 : 00 (50min.)

Main Hall 1 (Cosmos 1)

### Main Theme 4-C 〈 Prevention, Safety, Tools 〉

Chairpersons Masashi Neo, M.D. Yukihiro Matsuyama, M.D.

33

Intraoperative spinal cord monitoring - Multi center study of Japanese Society for Spine Surgery and Related Research (JSSR) ..... 149

Yukihiro Matsuyama, M.D., et al.

(Orthopedic Department, Nagoya University, School of Medicine, Nagoya, Aichi)

34

**Risk management during spinal instrumentation surgery: Full rotation 3D intraoperative imaging system (O-arm) ..... 151**

Tokumi Kanemura, M.D., et al.

(Konan Kosei Hospital, Spine Center, Konan, Aichi)

35

**Risk Management of Spinal Surgery for Hemodialysis-Related Spinal Disorders ..... 153**

Takashi Yamada, M.D., et al.

(Department of Orthopaedic Surgery, Kanto Medical Center NTT EC, Shinagawa-ku, Tokyo)

36

**The examination by the postoperative MRI of the epidural hematoma in Lumbar semi circumferential decompression(SCD) ..... 155**

Keisuke Fukuda, M.D., et al.

(Morioka-yuuai Hospital, Morioka, Iwate)

37

**Complications of cage-assisted anterior cervical discectomy and fusion ... 157**

Hiroshi Takei, M.D., et al.

(Department of Orthopaedic Surgery, Yamagata University, School of Medicine, Yamagata, Yamagata)

38

**Implant failure after thoracic and lumbar instrumentation ..... 159**

Masashi Neo, M.D., et al.

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

15 : 55 ~ 16 : 40 (45min.)

Main Hall 2 (Cosmos 2)

## Free Papers 5-C

### < Tumors in thoracic and lumbar spine >

Chairpersons Izumi Koyanagi, M.D.

39

**Spinal cord tumors arising from or around conus medullaris: Operative findings and functional recovery ..... 161**

Toshihiro Takami, M.D., et al.

(Department of Neurosurgery, Osaka City University Graduate School of Medicine, Osaka, Osaka)

40

**Thoracoscopic en bloc extirpation of parosteal osteoid osteoma of T9 vertebra: A case report ..... 163**

Kanji Mori, M.D., et al.

(Department of Orthopaedic Surgery, Shiga University of Medical Science, Ohtsu, Shiga)

41

**Spinal surgical treatment for anterior sacral mass** ..... 165

Yukoh Ohara, M.D., et al.

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

42

**Total en bloc spondylectomy for spinal tumors in the lower lumbar spine.(Anterior and posterior combined approach)** ..... 167

Norio Kawahara, M.D., et al.

(Department of Orthopaedic Surgery, Kanazawa University Hospital, Kanazawa, Ishikawa)

Guest  
Speaker

**Intraoperative radiotherapy combined with posteriorfor surgery for cervical spinal metastases**

Taiji Kondo, M.D.

(Department of Orthopedic Surgery, Metropolitan Komagome Hospital, Bunkyo-ku, Tokyo)

43

**Three cases of large retroperitoneal tumor**..... 169

Kazuhiro Masuda, M.D., et al.

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

16 : 00 ~ 16 : 40 (40min.)

Main Hall 1 (Cosmos 1)

## Main Theme 3-B < MED as MIS >

Chairpersons Munehito Yoshida, M.D.

Guest  
Speaker

**Tips and Pitfalls of Endoscopic Lumbar Surgery – With my experience of 1,300 Endoscopic Lumbar Surgery –**

Hirohiko Inanami, M.D.

(Iwai Medical Foundation Iwai Orthopaedic Medical Hospital, Edogawa-ku, Tokyo)

44

**Microendoscopic Revision Surgery for Recurrent lumbar Disc Herniation** ..... 171

Tsuyoshi Okudaira, M.D., et al.

(Department of Orthopaedic Surgery, Nagasaki Rosai Hospital, Saseho, Nagasaki)

45

**The learning curve of microendoscopic muscle preserving midline interspinatus interlaminar decompression(ME-MILD)** ..... 173

Tomohisa Harada, M.D., et al.

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

46

**Percutaneous endoscopic lumbar disectomy with unilateral interlaminar approach**..... 175

Sumito Shimizu, M.D., et al.

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

47

**New hemostatic material in spinal microendoscopic surgery** ..... 177

Motohide Shibayama, M.D., et al.

(Aichi Spine Institute, Niwa, Aichi)

16 : 40 ~ 16 : 45

**Stretch Break** 5min.

16 : 45 ~ 17 : 30 (45min.)

Main Hall 1 (Cosmos 1)

## Main Theme 2-C < Vertebroplasty 1 >

Chairpersons Masahumi Machida, M.D. Toru Koizumi, M.D.

48

**Is PVP under image-guided procedure truly safe?-Analysis by CT evaluation-** ..... 179

Shinjiro Tomita, M.D., et al.

(Department of Orthopedic Surgery, Nagasaki Kamitomachi Hospital, Nagasaki, Nagasaki)

Guest  
Speaker

**Pulmonary embolism caused by calcium phosphate bone paste(CPC) after vertebroplasty: A case report**

Kanzo Yokoo, M.D.

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

49

**Percutaneous Vertebro Plasty(PVP)for Compression Fracture of Spine- efficacy and Complication** ..... 181

Naoaki Kasai, M.D., et al.

(Shinyokohama Spine Clinic, Yokohama, Kanagawa)

50

**Endoscopic percutaneous vertebroplasty and kyphoplasty using calcium phosphate cement for osteoporotic vertebral compression fractures** ..... 183

Yasuhiro Nanri, M.D., et al.

(Department of Orthopaedic Surgery, Kouseiren Namerikawa Hospital, Namerikawa, Toyama)

Guest  
Speaker

**Percutaneous Vertebroplasty; Our Experience in 1,000 Consecutive Cases**

Nobuo Kobayashi, M.D.

(Department of Radiology, St. Luke's International Hospital, Chuo-ku, Tokyo)

Guest  
Speaker

**A study of HA block for osteoporotic spine fracture**

Hiromi Matsuzaki, M.D.

(Nihon University Research Center, Chiyoda-ku, Tokyo)

16 : 45 ~ 17 : 20 (35min.)

---

Main Hall 2 (Cosmos 2)

## Main Theme 4-B 〈 Risk management in spinal surgery 〉

Chairpersons Hiroshi Takei, M.D.

51

**The rare complications of anterior cervical surgery: an issue of disclosure and apology to the patients** ..... 185

Masanori Ito, M.D., et al.

(Department of Neurosurgery, Juntendo University Urayasu Hospital, Urayasu, Chiba)

52

**Intraoperative cardiac arrest in spine surgeries** ..... 187

Tomoto Suzuki, M.D., et al.

(Department of Orthopaedic Surgery, Yamagata Saisei Hospital, Yamagata, Yamagata)

53

**How treat extremely rare cases with unexpected clinical courses?** ... 189

Motoo Kubota, M.D., et al.

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

54

**Incidence and management of lethal cardiovascular complication following spinal surgery** ..... 191

Takeshi Okamoto, M.D., et al.

(Department of Orthopaedic Surgery, The Tazuke Kofukai Medical Research Institute, Kitano Hospital, Osaka, Osaka)

17 : 20 ~ 18 : 05 (45min.)

---

Main Hall 2 (Cosmos 2)

## Free Papers 5-I 〈 Lumbar disc herniation 〉

Chairpersons Yuichiro Nishijima, M.D. Masahito Hara, M.D.

55

**Acute Cauda Equina Syndrome Secondary to Lumbar Disc Herniation** ... 193

Yoshifumi Kawanabe, M.D., et al.

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

56

**Spontaneous absorption of recurrent lumbar disc herniation after microdiscectomy** ..... 195

Yuichiro Nishijima, M.D.

(Nishijima Spine Clinic, Chofu, Tokyo)

57

**A minimal 10-year follow-up of osteoplastic hemi-laminectomy in patients with lumbar foraminal disc herniation** ..... 197

Tomoaki Toyone, M.D., et al.

(Department of Orthopaedic Surgery, Teikyo University Chiba Medical Center, Ichihara, Chiba)

58

**Fenestration of far lateral lumbar disc herniation** ..... 199

Kentaro Shimizu, M.D., et al.

(Department of Orthopaedic Surgery, Sano Kosei General Hospital, Sano, Tochigi)

59

**The 5 cases which complained L5 or S1 radicular pain caused by central spinal central stenosis of the L2/3 and L3/4 space** ..... 201

Fumiko Tajima, M.D.

(Orthopaedic Department, Shinobu Hospital, Fukushima, Fukushima)

60

**The effectiveness of gabapentin in patients with failed back surgery syndrome** .....203

Takahiro Sanada, M.D., et al.

(Orthopaedic Department, Funabashi Orthopedic Hospital, Funabashi, Chiba)

17 : 30 ~ 18 : 00 (30min.)

Main Hall 1 (Cosmos 1)

## Main Theme 4-A

### < Informed consent and Risk management >

Chairpersons Shigeo Sano, M.D.

61

**Risk management in spinal surgery practice** ..... 205

Izumi Koyanagi, M.D., et al.

(Department of Neurosurgery, Sapporo Medical University, School of Medicine, Sapporo, Hokkaido)

62

**Adverse event and liability issue associated with spinal surgery in American neurosurgical practice** ..... 207

Masanori Ito, M.D., et al.

(Department of Neurosurgery, Juntendo University Urayasu Hospital, Urayasu, Chiba)

Guest  
Speaker

**Technical error and Communications error**

Naoki Kinomoto (Lawyer)

(The Dai-ichi Tokyo Bar Association)

Guest  
Speaker

**Risk Management in Spine operation**

Shigemi Oshida

(Division of Legal Medicine, Department of Social Medicine, Nihon University School of Medicine, Itabashi-ku, Tokyo)

18 : 30 ~ 20 : 00  
5th Floor (Orion)

Banquet



12 September (Sat.)

8 : 10 Registration

8 : 35 ~ 9 : 20 (45min.)

Main Hall 1 (Cosmos 1)

## Spine Leader's Lecture B

8 : 35 ~ 8 : 50 (15min.)

Chairperson Naoki Asami, M.D.

**V Olivier Gille, M.D., Ph.D.** (Service Orthopedie, Pr. Vital Groupe hospitalier Pellegrin - C.H.U. de Bordeaux, Bordeaux, France)

**Mini-invasive trans-spinal process recalibration of the lumbar canal**

..... 208  
(Showa Ika Kogyo Co. Ltd.)

8 : 50 ~ 9 : 05 (15min.)

Chairperson Shigeru Hirabayashi, M.D.

**VI Masashi Yamazaki, M.D.** (Department of Orthopaedic Surgery, Chiba University Graduate School of Medicine, Chiba, Chiba)

**Pitfalls of cervical posterior instrumentation surgery** ..... 211  
(Synthes K.K.)

9 : 05 ~ 9 : 20 (15min.)

Chairperson Ken Ishii, M.D. Ph.D.

**VII Shigeto Ebata, M.D.** (Department of Orthopaedic Surgery, Saiseikai Kawaguchi Hospital, Kawaguchi, Saitama)

**Surgical procedures and technical problems of endoscopic spine surgery for lumbar lesions** ..... 213  
(Biomet Japan, Co.)

9 : 20 ~ 9 : 30

Transfer 10min.



9 : 30 ~ 10 : 30 (60min.)

---

(Cosmos 1, Cosmos 2, Room601)

## Hands-on Session B

ROOM

Cosmos 1

Chairperson Kiyoshi Kumano, M.D.  
Hybrid type spinal stabilization and fusion system for the treatment of degenerative lumbar spinal disease by Junichi Kunogi, M.D. (Showa Ika Kogyo Co. Ltd.)

Cosmos 2

Chairperson Shigeru Hirabayashi, M.D.  
Clinical Advantage of Synapse in Cervical Posterior Fixation by Masashi Yamazaki, M.D. (Synthes K.K.)

601

Chairperson Ken Ishii, M.D. Ph.D.  
Minimally invasive PLIF using Vue pass System by Shigeto Ebata, M.D. (Biomet Japan, Co.)

10 : 30 ~ 10 : 40

Transfer 10min.

10 : 40 ~ 11 : 45 (65min.)

---

Main Hall 1 (Cosmos 1)

## Main Theme 2-A < Thoracolumbar spine in the elderly >

Chairpersons Takashi Yamazaki, M.D. Satoshi Tani, M.D.

Guest  
Speaker

**A sliding scale-a convenient tool for assessing the safety zone of an operation in an elderly patient**

Shigeo Sano, M.D.

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

63

**Perioperative complications in lumbar spinal surgery of the patients with over 75 years old: incidence and risk factors** ..... 215

Taito Itabashi, M.D., et al.

(Department of Orthopedic Surgery, Hachinohe Municipal Hospital, Hachinohe, Aomori)

64

**Preoperative assessment of coronary stenosis in the spinal surgery of elderly patients** ..... 217

Hiroaki Manabe, M.D., et al.

(Spine Center, Shin-Komonji Hospital, Kitakyusyu, Fukuoka)

65

**Results of posterior microendoscopic decompressive laminotomy for the elderly patients with lumbar spinal stenosis** ..... 219

Yukihiro Nakagawa, M.D., et al.

(Department of Orthopedic Surgery, Wakayama Medical University, Wakayama, Wakayama)

66

**Clinical analysis of spinal surgery for patients age 80 years or older** ..... 221

Keishi Tsunoda, M.D., et al.

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

67

**Spinal Surgery for Highly Elder Aged** ..... 223

Tatsuo Takahashi, M.D., et al.

(Department of Neurosurgery, Nagoya Medical Center, Nagoya, Aichi)

68

**On operation treatment for delayed spinal canal stenosis after osteoporotic spinal compression fracture, we tried short fusion used spinous process plate and pedicle screw and rod fixation** ..... 225

Yuichi Maeda, M.D.

(Department of Orthopedic Surgery, Arao City Hospital, Arao, Kumamoto)

69

**Clinical significance of long instrumented realignment fusion in osteoporotic elderly patients with sagittal spinal malalignment** ..... 227

Takachika Shimizu, M.D

(Gunma Spine Center (Harunaso Hospital), Takasaki, Gunma)

10 : 40 ~ 11 : 30 (50min.)

**Main Hall 2** (Cosmos 2)

## Main Theme 3-C < MIS in fusion >

Chairpersons Takeshi Uchida, M.D. Koji Sato, M.D.

70

**The influence of minimally invasive lumbar interbody fusion on the back muscles : evaluation by MRI and needle myography** ..... 229

Takanori Saito, M.D., et al.

(Orthopedic Department, Kansai Medical University Takii Hospital, Moriguchi, Osaka)

71

**Toward the less invasive lumbar interbody fusion for degenerative diseases-Comparison between two different surgical approach-** ..... 231

Takeshi Uchida, M.D., et al.

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

72

**The surgical adjustment and technique of mini-open PLIF for lumbar disc herniation** ..... 233

Masayuki Nakahara, M.D., et al.

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

73

**Minimally invasive transforaminal lumbar interbody fusion for degenerative lumbar spondylolisthesis** ..... 235

Taketoshi Kushida, M.D., et al.

(Department of Orthopedic Surgery, Kansai Medical University, Takii Hospital, Moriguchi, Osaka)

74

**Minimally invasive spine fixation for multi level lesion** ..... 237

Koji Sato, M.D., et al.

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

75

**Mini-ALIF for degenerative lumbar spinal disorders -option for scoliosis or instability-** ..... 239

Tetsuya Morimoto, M.D.

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

11 : 30 ~ 12 : 05 (35min.)

Main Hall 2 (Cosmos 2)

## Main Theme 3-A 〈 Decompression in MIS 〉

Chairpersons Masakazu Takayasu, M.D. Hitoshi Hase, M.D.

76

**Resection of spinal cord tumor via MILD approach**..... 241

Shigeyuki Kitanaka, M.D., et al.

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

77

**Problems of the posterior lumbar approach technique that does not keep kissing spines** ..... 243

Akira Itoi, M.D., et al.

(Department of Orthopedic, Juntendo University Shizuoka Hospital, Izunokuni, Shizuoka)

78

**Minimally invasive surgery for lumbar disc herniation Spinous process splitting, unilateral approach and discectomy (modified Love's method) for lumbar disc herniation : a comparison with Love's method** ..... 245

Masahiro Joko, M.D., et al.

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

79

**Yellow ligament floating method for lumbar canal stenosis-safety, less invasiveness to nerve, clinical results-** ..... 247

Takashi Yamazaki, M.D., et al.

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

12 : 05 ~ 12 : 10

Stretch Break 5min.

11 : 45 ~ 12 : 10 (25min.)

Main Hall 1 (Cosmos 1)

## Main Theme 2-B 〈 Cervical spine in the elderly 〉

Chairpersons Masatoshi Sumi, M.D.

80

**Surgical outcome of cervical spondylotic myelopathy in patients aged 80 years old and over** ..... 249

Atsushi Tanida, M.D., et al.

(Department of Orthopedic Surgery, Faculty of Medicine, Tottori University, Yonago, Tottori)

81

**Surgical treatment for cervical myelopathy of elderly patients over 75 years old** ..... 251

Masahito Yuzurihara, M.D., et al.

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

82

**Clinical outcome of multilevel ACF for CSM, OPLL in the elderly patients** ..... 253

Macondo Mochizuki, M.D., et al.

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

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

Main Hall 1 (Cosmos 1)

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

12 : 10 ~ 12 : 25 (15min.)

Chairperson Takachika Shimizu, M.D.

**VIII Christian Mazel, M.D.** (Department of Orthopaedic Surgery, Institut Mutualiste Montsouris, Paris, France)

**Indications and limits of spinal instrumentation in patient over 80** ... 254  
(Tokibo Co.)

12 : 25 ~ 12 : 40 (15min.)

Chairperson Eiichiro Honda, M.D.

**IX Stephané Ramaré, M.D.** (Centre Hospitalier Régional de Rambouillet, Chirurgie Orthopédique, Rambouillet, France)

**Can we challenge the tulip-shaped polyaxial screw?**

**-Development of Cambo System-** ..... 256  
(Kisco DIR, Co.)

12 : 40 ~ 12 : 55 (15min.)

Chairperson Minoru Hoshimaru, M.D.

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

Calcium Phosphate Cement Vertebroplasty for Osteoporotic Vertebral  
..... 258  
(HOYA, Co.)

12 : 55 ~ 13 : 10 (15min.)

Chairperson Masakazu Takayasu, M.D.

XI Ken Ishii, M.D, Ph.D. (Department of Orthopaedic Surgery, School of Medicine, Keio University, Shinjuku-ku, Tokyo)

Current and Future Trends in Minimally invasive spinal surgery (MISS)  
..... 267  
(Japan MDM Inc.)

13 : 10 ~ 13 : 20

Transfer 10min.

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

(Cosmos 1, Cosmos 2, Room601)

## Hands-on Session C

### ROOM

Cosmos 1

Chairperson Takachika Shimizu, M.D.

Reduction of high grade spondylolisthesis with Oria Claris instrumentation

by Christian Mazel, M.D. (Tokibo Co.)

Cosmos 2

Chairperson Eiichiro Honda, M.D.

Cambo System -New Concept of Pedicular Fusion-

by Stephané Ramaré, M.D. (Kisco DIR, Co.)

601

Chairperson Minoru Hoshimaru, M.D.

Surgical Technique of Calcium Phosphate Cement-Specific Vertebroplasty for Osteoporotic Vertebral Fractures

by Ryuichi Takemasa, M.D. (HOYA, Co.)

14 : 20 ~ 14 : 30

Transfer 10min.

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

---

Main Hall 1 (Cosmos 1)

## The First Prize Winner at the 13<sup>th</sup> International ArgoSpine Symposium 2009

Chairperson Naoki Asami, M.D.

**Roberto Bassani, M.D.** (Orthopaedic and Trauma Department Fondazione  
IRCCS Policlinico Universitario San Matteo, Pavia, Italy)

**Early and late complication in Tdr Charite. Anterior Revision  
Surgery after 7 years** ..... 262  
(Showa Ika Kogyo Co. Ltd.)

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

---

Main Hall 1 (Cosmos 1)

## Special Lecture III (Postgraduate Lecture of JOA)

Chairperson Hirohiko Inanami, M.D.

**Jae-yoon Chung, M.D.** (Department of Orthopaedics, Chonnam National  
University Hospital, Donggu Gwangju, Korea)

**Percutaneous endoscopic Discectomy by contralateral approach for  
distally migroted LDH** ..... 264  
(Cosponsored by Johnson & Johnson Co.)

15 : 30 ~ 15 : 40

Coffee Break 10min.

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

---

Main Hall 1 (Cosmos 1)

## Main Theme 2-C < Vertebroplasty 2 >

Chairpersons Motoo Kubota, M.D.

83

**Anterior decompression and reconstruction using large rectangular  
parallelepiped cages with posterior approach alone for osteoporotic  
thoraco-lumbar injuries** ..... 267

Tetsuya Suzuki, M.D., et al.

(Department of Orthopedic, Akita Kumiai General Hospital, Akita, Akita)

84

**Closing wedge osteotomy using titanium mesh cage for osteoporotic fractures with kyphotic deformity , and neurological compromise ... 269**

Kohei Kawaguchi, M.D., et al.

(Department of Orthopedic Surgery, Department of Spinal Surgery, Kannto-Rousai Hospital, Kawasaki, Kanagawa)

85

**Vertebroplasty, with or without spinal instrumentation, for osteoporotic vertebral fractures ..... 271**

Sadahiko Konishi, M.D., et al.

(Department of Orthopedic Surgery, Osaka City General Hospital, Osaka, Osaka)

Guest  
Speaker

**Vertebroplasty with Instrumentation for Osteoporotic Vertebral Collapse**

Itaru Oda, M.D.

(Hokkaido Orthopaedic Memorial Hospital, Sapporo, Hokkaido)

15 : 40 ~ 16 : 50 (70min.)

Main Hall 2 (Cosmos 2)

## Main Theme 3-E < MIS in Cervical spine >

Chairpersons Tateru Shiraishi, M.D. Nobuyuki Shimokawa, M.D.

Guest  
Speaker

**A New Laminoplasty Procedure for Dumb bell Type Cervical Spinal Cord Tumors**

Tateru Shiraishi, M.D.

(Department of Orthopaedic Surgery, Tokyo Dental College, Ichikawa General Hospital, Ichikawa, Chiba)

86

**Resection of OPLL of the cervical spine by anterolateral vertebrectomy ..... 273**

Tsukasa Nishiura, M.D., et al.

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

87

**Clinical results of cervical laminectomy via a unilateral spinous process-splitting approach ..... 275**

Takuya Kawai, M.D., et al.

(Department of Orthopaedic, Yokohama City University Hospital, Yokohama, Kanagawa)

88

**Anterior foraminotomy for the treatment of cervical radiculopathy ... 277**

Takashi Nagata, M.D., et al.

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

89

**Anterior cervical spinal surgery -Indications and limitations of our without fusion methods- .....** 279

Masahito Hara, M.D., et al.

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

90

**Minimally Invasive Surgery of C1-C2 Rod Cantilever Technique using Navigation .....** 281

Hisaharu Gotou, M.D., et al.

(Department of Neurosurgery, Aichi Medical University, Aichi, Aichi)

91

**Usefulness of transvertebral key-hole foraminotomy for cervical radiculopathy in active athletes .....** 283

Masakazu Takayasu, M.D., et al.

(Department of Neurosurgery, Aichi Medical University School of Medicine, Aichi, Aichi)

92

**Clinical outcome of posterior cervical decompression using a tubular retractor for cervical radiculopathy with a minimum follow-up of 2 years .....** 285

Takuya Fujita, M.D., et al.

(Department of Orthopaedic Surgery, Kanazawa Medical University, Kawakita, Ishikawa)

93

**The result for muscle preserving foraminotomy and new approach for cervical foraminotomy which preserves all deep extensor muscles ...** 287

Ryoma Aoyama, M.D., et al.

(Spine and Spinal Cord Disorders Unit, Tokyo Dental College Ichikawa General Hospital,  
Ichikawa, Chiba)

16 : 50 ~ 16 : 55

Stretch Break 5min.

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

Main Hall 1 (Cosmos 1)

## Free Papers 5-J < OYL and others >

Chairpersons Norio Kawahara, M.D.

94

**Surgery for thoracic myelopathy caused by ossification of the ligamentum flavum .....** 289

Hiroki Hirabayashi, M.D., et al.

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

95

**Dural ossification in ossified yellow ligament of the thoracic spine ...** 291

Takahisa Kaneko, M.D., et al.

(Department of Neurosurgery, Sapporo Medical University, Sapporo, Hokkaido)



96

**The strategy of surgical management for the thoraco-lumbar spinal tuberculosis** ..... 292

Vo Van Thanh, M.D., et al.  
(Spinal Surgery Department A, Hospital for Trauma-Orthopedics, Hochiminh City, Vietnam)

97

**Subdural hematoma in thoracic spine associated with anticoagulant therapy: A case report** ..... 295

Takashi Takizawa, M.D., et al.  
(Department of Orthopaedic Surgery, Shinshu University School of Medicine, Matsumoto, Nagano)

16 : 40 ~ 16 : 50

Coffee Break 10min.

16 : 50 ~ 17 : 40 (50min.)

Main Hall 1 (Cosmos 1)

### Free Papers 5-F 〈 Fusion in cervical spine 〉

Chairpersons Masatoshi Sumi, M.D. Tatsuo Takahashi, M.D.

98

**Short term results of DFDD in radiological evaluations for anterior cervical discectomy and fusion** ..... 297

Satoshi Tani, M.D., et al.  
(Department of Neurosurgery, Jikei University School of Medicine, Minato-ku, Tokyo)

99

**Anterior cervical plate and cage fixation for multilevel myelopathy (Hybrid technique)** ..... 299

Seiichi Odate, M.D., et al.  
(Department of Orthopaedic Surgery, Spine Center, Gakkentoshi Hospital, Sagara, Kyoto)

100

**Instrument failure of caudal end screw after posterior long fusion for cervical spine** ..... 301

Masato Takabatake, M.D., et al.  
(Department of Orthopedic, Kobe Rosai Hospital, Kobe, Hyogo)

101

**A case report of cervical kyphotic deformity treated with simultaneous single-stage anterior and posterior correction and fusion surgery** ... 303

Satoshi Ogihara, M.D., et al.  
(Department of Spine and Orthopaedic Surgery, Spine Center, Japanese Red Cross Medical Center, Shibuya-ku, Tokyo)

102

**Two cases of high-grade cervical spondylolisthesis with fused segments treated by 360 degrees spinal fusion** ..... 305

Hideo Hosoe, M.D., et al.  
(Department of Orthopaedic Surgery, Gifu University School of Medicine, Gifu, Gifu)

103

Treatment for cervical myelopathy due to severe kyphosis with one stage corrective fixation both anteriorly and posteriorly ..... 307

Kiyohiro Nakamichi, M.D., et al.

(Keiyuu Orthopedic Hospital, Tatebayashi, Gunma)

104

Posterior decompression and fixation for cervical spondylotic myelopathy with local kyphosis ..... 309

Nobuyuki Shimokawa, M.D., et al.

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

16 : 55 ~ 17 : 15 (20min.)

Main Hall 2 (Cosmos 2)

### Main Theme 3-D < Decompressor as MIS >

Chairpersons Shun-ichi Kihara, M.D.

105

Percutaneous Nucleotomy for Lumbar Disc Herniation using Dekompressor Preliminary results ..... 311

Toru Koizumi, M.D, et al.

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

106

Percutaneous Necleotomy with Dekompressor. Preliminary report ... 313

Masaki Mizuno, M.D., et al.

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

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

Main Hall 2 (Cosmos 2)

### Free Papers 5-H < Tools >

Chairpersons Junichi Kunogi, M.D.

107

Clinical application of the ultrasonic osteotome to spinal surgery ... 315

Hajime Hoshino, M.D, et al.

(Department of Orthopedic Surgery, Hakujuikai Memorial Hospital, Adachi-ku, Tokyo)

108

Convenient tool for dural closure using VCS Clip Applier ..... 317

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

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

## Free Papers 5-B 〈 Tumors in cervical spine 〉

Chairpersons Makoto Taniguchi, M.D. Toshihiro Takami, M.D.

109

**An operative case of vertebral plasmacytoma in the upper cervical region** ..... 319

Keiichi Akatsuka, M.D., et al.

(Division of Neurosurgery, Institute of Neurological Science, Faculty of Medicine,  
Tottori University, Yanago, Tottori)

110

**Surgery of spinal nerve sheath tumors originating from C1 or C2 spinal level** ..... 321

Toshihiro Takami, M.D., et al.

(Department of Neurosurgery, Osaka City University Graduate School of Medicine,  
Osaka, Osaka)

111

**Reconstruction of the cervical spine following extirpation of giant spinal cord tumors in high cervical region** ..... 323

Takachika Shimizu, M.D., et al.

(Gunma Spine Center (Harunaso Hospital), Takasaki, Gunma)

112

**Anterior approach to cervical intramedullary cord tumor** ..... 325

Hidetoshi Murata, M.D., et al.

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

113

**Two cases with retroodontoid pseudo tumor : successful resection by a posterior approach without dural incision** ..... 327

Masayuki Ishihara, M.D., et al.

(Orthopedic Department, Kansai Medical University Takii Hospital, Moriguchi, Osaka)

17 : 40 ~ 18 : 05 (25min.)

Main Hall 1 (Cosmos 1)

## Free Papers 5-K 〈 Surgical technique 〉

Chairpersons Akiyoshi Yamazaki, M.D.

114

**Our technique of recapping-laminoplasty for lumbar canal stenosis and postoperative fusion rate of the recapped lamina** ..... 329

Yujiro Takeshita, M.D., et al.

(Department of Spine and Orthopaedic Surgery, Spine Center, Japanese Red Cross Medical Center, Shibuya-ku, Tokyo)

115

**ALIF surgery safely performed by young spinal surgeon** ..... 337

Masaaki Nakajima, M.D., et al.

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

116

**New CR image processing condition for clarifying preoperative marking X-ray of posterior lumbar surgery** ..... 333

Yujiro Takeshita, M.D., et al.

(Department of Spine and Orthopaedic Surgery Spine Center, Japanese Red Cross Medical Center, Shibuya-ku, Tokyo)

18 : 05 ~ 18 : 10

Main Hall 1 (Cosmos 1)

~ Closing Remarks ~

President Shigeo Sano, M.D.

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