# The Second Day—April 17 (Friday)

#### Room 1

#### Debate 2

9:00~10	0:20 Moderator: H. Nagashima
	Cervical myelopathy of the late-stage elderly: Anterior vs. Posterior
2-1-DB2-1	Anterior decompression and fusion for cervical spondylotic myelopathy in patients over seventy-
	five years old ······399
	S. Shindo, et al., Dept. of Orthop. Surg., Kudanzaka Hospital
2-1-DB2-2	Selective anterior decompression and fusion for cervical spondylotic myelopathy in the elderly
	patients 399
	S. Taniguchi, et al., Department of Orthop. Surg., Kansai Medical University Takii Hospital
2-1-DB2-3	Surgical treatment for old-old patients with cervical compressive myelopathy in posterior approach
	Y. Imajo, et al., Department of Orthopaedic Surgery, Yamaguchi University Graduate School o
	Medicine
2-1-DB2-4	Operation procedure for cervical spondylotic myelopathy in over 75-year-old patients400
	K. Otani, et al., Dept. of Orthop. Surg., Fukushima Medical Univ. School of Medicine

#### Break

# Symposium 3

10:30~1	12:00 Moderators: M. Nakamura
	M. Watanabe
	Current status and future view of spinal cord regeneration
2-1-S3-1	Intrathecal recombinant human Hepatocyte Growth Factor (HGF) treatment for spinal cord injury:
	past achievements and future perspective ·······401
	K. Kitamura, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-1-S3-2	Amiloride promotes the survival of oligodendrocyte precursor cells and remyelination after spinal
	cord injury in rat by control of endoplasmic reticulum stress ·······401
	T. Imai, et al., Dept. of Orthop. Surg., Tokai Univ. School of Medicine
2-1-S3-3	Schwann cell transplantation for treatment of spinal cord injury: genetic engineering to secrete
	neurotrophin D15A promotes transplanted cell survival and remyelination · · · · · · 402
	H. Kanno, et al., Dept. of Orthop. Surg., Tohoku Univ. School of Medicine

2-1-S3-4	Engrafted neural stem cells promote functional recovery through interactive synaptic reorganiza-
	tion with spared host neurons after spinal cord injury ························402
	S. Okada, et al., Department of Orthopedic Surgery, Graduate School of Medical Sciences, Kyushu
	University
2-1-S3-5	Cell therapy in chronic cervical spinal cord injury ························403
	H. Suzuki, et al., Dept. of Orthop. Surg., Yamaguchi Univ. School of Medicine. Division of Genetics
	and Development, Toronto Western Research Institute
2-1-S3-6	Restoration of volitional walking via artificial neural connection in patients with severe spinal cord
	injury······403
	Y. Nakao, et al., Dept. of Developmental Physiology, National Institute for Physiological Sciences,
	Okazaki, Japan

#### Break

#### Luncheon Seminar 8

12:10~13:	10 Moderator: T. Toyone
2-1-LS8-1	Total management for the patient with chronic musculoskeletal pain ·······················40
	Y. Kawaguchi, Dept. of Orthop. Surg., Toyama Univ. School of Medicine
2-1-LS8-2	Significance of surgical treatment of the spine $\sim$ adult spine deformities $\sim \cdots 40$
	K. Hasegawa, Niigata Spine Surgery Center

#### Break

# Symposium 4

13:20~14:	: 50 Moderators : S. Kawai
	T. Tamaki
	Learn "Shou Zen Kei Go" from legendary spinal surgeon
2-1-S4-1	Message for next generation 405
	S. Kikuchi, Fukushima Medical University
2-1-S4-2	Loss of phase cancellation as a mechanism of enhancement of spinal cord evoked potentials in
	compression myelopathies 405
	T. Tani, et al., Dept. of Orthop. Surg., Kubokawa Hosp.
2-1-S4-3	$Historical\ perspective\ of\ spine\ surgery\ in\ Japan\ from\ viewpoint\ of\ cervical\ myelopathy\cdots\cdots 4066660000000000000000000000000000000$
	K. Yonenobu, Graduate School of Health Care Sciences, Jikei Institute
2-1-S4-4	Suggestions from 34 year experience in scoliosis clinic · · · · · · · · · · · · · · · · · · ·
	N. Suzuki, Scoliosis Center, Medical Scanning Tokyo, Tokyo, Japan

15:00~16:50

2-2-M5-2

#### Break

#### Video Session

Moderators: Y. Nohara

	Y. Hoshino
	Japanese original operative prodecure worthy to transmit to the world
2-1-VS-1	Simultaneous Double-Rod Rotation Technique for Correction of AIS · · · · · · 40
	H. Sudo, et al., Dept. of Orthop. Surg., Hokkaido Univ. Hosp.
2-1-VS-2	New exposures of posterior cervical spine through inter–muscular plane and their applications $\cdots 40$
	T. Shiaraishi, et al., Dept. of Orthop. Surg., Tokyo Dental College Ichikawa General Hospital
2-1-VS-3	Osteoplastic laminectomy for lumbar canal stenosis with degenerative spondylolisthesis $\cdots\cdots 40$
	H. Oda, et al., Dept. of Orthop. Surg., Shunan City Shinnanyo Hosp.
2-1-VS-4	Posterior spinal shortening for paraparesis following vertebral collapse due to osteoporosis $\cdots \cdots 40$
	K. Saita, Department of Orthopaedic Surgery, Saitama Medical Center, Jichi Medical University,
2-1-VS-5	Reconstruction of the subaxial cervical spine using pedicle screw instrumentation $\cdots 40$
	K. Abumi, Sapporo Orthopaedic Hospital-Center for Spinal Disorders
	Break
	SV Evening Seminar
17:00~18	3:00 Moderator: H. Konishi
2-1-SEV	Complications of spinal surgeries. What causes a disaster?
	M. Neo, Dept. of Orthop. Surg., Osaka Medical College, Takatsuki, Japan
Roo	om 2
	Main Theme 5
9:00~9	: 50 Moderator : M. Yoshida
Indication an	nd limitation of minimal invasive spine surgery from the point of view of medium-and
	long term results
2-2-M5-1	Which factors affect to clinical outcomes of microendoscopic decompression surgery for lumba

A. Minamide, et al., Dept. of Orthop. Surg., Wakayama Medical University

Outcomes and radiological assessment in cases of lumbar degenerative spondylolisthesis more than 5 years after treatment with minimally invasive decompression ·······410

G. Mori, et al., Department of Orthopedics, Japanese Red Cross Kyoto Daiichi Hospital

2-2-M5-3	Comparison study of five-year postoperative outcoms of different surgical procedures for
	degenerative lumbar spondylolisthesis · · · · · · 411
	S. Ebata, et al., Dept. of Orthop. Surg., Yamanashi Univ.
2-2-M5-4	Long-term Results of the Mini-open TLIF for Degenerative Lumbar Disorders······411
	K. Miyagawa, et al., Chiba Central Medical Center, Chiba, Japan
2-2-M5-5	The microendoscopic decompression surgery for the lumbar spinal canal stenosis complicated with
	degenerative scoliosis · · · · · · 412
	M. Nagae, et al., Dept. of Orthopaedics, Graduate School of Medical Science, Kyoto Prefectural
	University of Medicine
2-2-M5-6	$ Evaluation \ about \ effects \ of \ microsurgical \ bil a teral \ decompression \ via \ unilateral \ approach \ \ (MBDU) $
	for degenerative lumbar disease with scoliosis or instability · · · · · · 412
	M. Kato, et al., Dept. of Orthop. Surg., Osaka City General Hospital, Osaka, Japan

#### Main Theme 6

9:50~1	0:40 Moderator: M. Neo
	Surgical risk management for high risk spine surgery
2-2-M6-1	Transcranial motor evoked potentials in high risk surjery: Spinal cord monitoring working group
	study of Japanese Society for Spine Surgery and Related Research
	S. Kobayashi, et al., Spinal cord monitoring working group of Japanese Society for Spine Surgery
	and Related Research
2-2-M6-2	Comparative study of intraoperative transcranial motor-evoked potentials between intramedullary
	and extramedullary spinal cord tumors
	A. Yasuda, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-2-M6-3	Risk factors and countermeasures for postoperative cerebrospinal fluid leakage associated with total
	en bloc spondylectomy · · · · 414
	N. Yokogawa, et al., Dept. of Orthop. Surg., Kanazawa Univ.
2-2-M6-4	A radiation–free cervical screw navigation procedure with the Screw Guide Template system $\cdots 414$
	S. Kaneyama, et al., Dept. of Orthop. Surg., Kobe Rosai Hospital
2-2-M6-5	Postoperative risk management after multi-level ACF
	A. Aiba, et al., Dept. of Orthop. Surg., Numazu City Hospital
2-2-M6-6	Perioperative complications of pediatric spinal surgery for high-risk patients
	M. Ito, et al., Dept. of Orthop. Surg., Graduate School of Medicine, Kobe University

# Main Theme 7

10:40~11:3	Moderator : S. Matsunaga
Elucidation of natural history of spinal disease	
2-2-M7-1	Aggravation of cervical spine instabilities in rheumatoid arthritis of outpatients -A prospective,
	multicenter over 10-year cohort study- · · · · · · 416
	H. Hirata, et al., Hyogo Organization for Spinal Disorders
2-2-M7-2	Radiographic characteristics in asymptomatic patients with cervical ossification of the posterior
	longitudinal ligament 416
	T. Furuya, et al., Department of Orthopaedic Surgery, Chiba University Graduate School of Medicine
2-2-M7-3	Neurologic recovery after conservative treatment for cervical spinal cord injury without bone and
	disc injury 417
	E. Mori, et al., Dept. of Orthop. Surg., Spinal Injuries Center, Iizuka, Japan
2-2-M7-4	The prognosis factors of requiring surgery for Lumbar Spinal Stenosis ·······417
	M. Fukushima, et al., Dept. of Orthopaedic and Spinal Surg., University of Tokyo, Tokyo, Japan.
2-2-M7-5	Association between vertebral deformity and bone mineral density in a population-based cohort
	study of vertebral fracture ···········418
	J. Yamada, et al., Department of Orthopedic Surgery, Mie University Graduate School of Medicine
2-2-M7-6	MRI findings related to compression ratio of vertebrae in osteoporotic vertebral; a multicenter
	prospective cohort study between 2012 and 2014 ····················418
	S. Takahashi, et al., Dept. of Orthop. Surg., Osaka City Univ.
	Break
	Luncheon Seminar 9
12:10~13:1	0 Moderator : M. Shimode
2-2-LS9	Surgical treatment for adult spinal deformity -from past to next decade- · · · · · · 419
	Y. Matsuyama, Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine
	Break
	Invited Lecture 7
13:20~14:2	20 Moderator : <b>T. Fuji</b>
2-2-IL7	The role of C2-C7 and C0-C2 angle in the development of dysphagia after cervical spine surgery
•	419
	Wei Tian, Department of Spine Surgery, Beijing Ji'Shui'Tan Hospital, 4th Clinical Medical College of
	Peking University, China

#### Break

#### Main Theme 8

14:30~1	5:20 Moderator: A. Okawa
Cur	rent status and problem in clinical research of ossification of spinal ligaments
2-2-M8-1	Ossified lesions of the whole spine in patients with cervical OPLL - Analysis using multidetector
	CT
	Y. Kawaguchi, et al., Dept. of Orthop. Surg., Toyama Univ. School of Medicine
2-2-M8-2	Surgical outcome of thoracic ossification of posterior longitudinal ligament in prospective
	multicenter study ·······················420
	S. Imagama, et al., Dept. of Orthop. Surg., Nagoya Univ. Graduate School of Medicine
2-2-M8-3	Predictive factors and outcomes in laminoplasty for cervical myelopathy caused by ossification of
	$posterior\ longitudinal\ ligament\ - The\ K-line\ in\ combination\ with\ dynamic\ factors421$
	Y. Menjo, et al., Dept. of Orthop. Surg., Hokkaidou Univ. Graduate School of Medicine
2-2-M8-4	Comparison of anterior decompression fusion and posterior decompression fusion for cervical
	ossification of longitudinal ligament with over $50\%$ canal–occupying ratio $\cdots\cdots$ 421
	T. Yoshii, et al., Dept. of Orthop. Surg., Tokyo Medical and Dental Univ. School of Medicine
2-2-M8-5	Impact of timing and indication of spinal cord decompression surgery for thoracic myelopathy
	caused by ossification of posterior longitudinal ligament
	M. Takahata, et al., Dept. of Orthop. Surg., Hokkaido Univ. School of Medicine
2-2-M8-6	Surgical outcomes of posterior decompression and fusion surgery using ossification-kyphosis angle
	for patients with OPLL in the thoracic spine ····································
	H. Uei, et al., Dept. of Orthop. Surg., Nihon Univ. School of Medicine
	Panel Discussion
15:20~1	6:50 Moderators: S. Konno
	K. Takeshita
Current sta	tus and problem in clinical research based on patient-reported outcomes including JOACMEQ and JOABPEQ
2-2-PD-1	Clinical outcome of patients with low back pain using psychological disorder in JOABPEQ and
Z-Z-I D-I	painDETECT
	A. Hiyama, et al., Dept. of Orthop. Surg., Tokai Univ. School of Medicine
2-2-PD-2	Comparison between anterior and posterior surgery for cervical compressive myelopathy using
	JOACMEQ ······423
	K. Miyamoto, et al., Department of Regional Medicine and Musculoskeletal Science, Gifu University
	Graduate School of Medicine, Gifu, Japan

2-2-PD-3	Preoperative psychological factors affect postoperative low back pain, but not patient's satisfaction
	in patients with lumbar spinal stenosis · · · · · · 424
	Y. Ishimoto, et al., Spine Care Center, Wakayama Medical University Kihoku Hospital
2-2-PD-4	The problems of JOABPEQ for evaluation of surgical outcomes of decompression for lumbar spinal
	stenosis – Deos preoperative low back pain affect the results of postoperative JOABPEQ? $$
	K. Watanabe, et al., Dept. of Orthop. Surg, Fukushima Medical University School of Medicine
2-2-PD-5	Does the use of a lumbosacral orthosis for aftertreatment of posterior lumbar interbody fusion with
	$instrumentation \ affect \ patient-based \ QOL \ outcomes \ and \ fusion \ status? \ \neg A \ prospective \ randomized$
	study
	H. Fujiwara, et al., Dept. of Orthop. Surg., National Hospital Organization Osaka Minami Medical
	Center
2-2-PD-6	Effect of number of fused segments on patient-based QOL outcome after posterior lumbar
	interbody fusion : the analysis of two-year follow-up $\cdots \cdots 425$
	T. Makino, et al., Dept. of Orthopaedic Surgery, Osaka University Graduate School of Medicine

#### Room 3

#### Morning Seminar 1

7:50~8:50

Moderator: Y. Shimada

2-3-MS1

The latest topics about the osteoporotic practice 426

S. Soen, Dept. of Orthop Surg. and Rheumatol., Nara Hospital, Kinki University School of Medicine, Ikoma, Japan

#### Break

9:00~9:50	Moderator: T. Hashimoto
	Osteoporotic vertebral fracture 5
2-3-F31-1	Mechanical changes in the vertebral bodies over time and changes in bone metabolism markers by
	anti-RANKL antibody 426
	K. Inage, et al., Dept. of Orthopaedic Surgery, Graduate School of Medicine, Chiba University
2-3-F31-2	The importance of psychological component change in osteoporotic vertebral fracture $\cdots\cdots427$
	N. Suzuki, et al., Department of Orthopaedic Surgery, Graduate School of Medical Sciences, Nagoya
	City University
2-3-F31-3	Pedicle Fracture as a Risk Factor of Pseudoarthrosis following Osteoporotic Vertebral Fracture 427
	Y. Fujioka, et al., Dept. of Orthop. Surg., JR Hiroshima General Hospital
2-3-F31-4	Analysis of sagittal spinopelvic alignment in elders with osteoporotic thoracolumbar kyphosis $\cdots \cdot 428$
	S. Inoue, et al., Department of Orthopaedic Surgery, Hyogo College of Medicine



2-3-F31-5	The effect of the spino–pelvic alignment at injury for the union of osteoporotic vertebral fracture $428$
	A. Iwata, et al., Spine center, Hakodate Central Hospital
2-3-F31-6	A survey of osteoporotis medication in our colaborated medical institutes $\cdots\cdots 429$
	H. Misawa, et al., Department of Orthopaedic Surgery, Okayama Medical Center

9:50~10:40	Moderator: H. Hosoe
	Osteoporotic vertebral fracture 6
2-3-F32-1	Posterior instrumented fusion without neural decompression for incomplete neurological deficits
	following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following osteoporotic vertebral fracture – Short fusion combined with spinous process plate- $\cdots$ 429 following process plate-
	A. Nakano, et al., Dept. of Orthop. Surg. Osaka Medical College
2-3-F32-2	Indication and limitation of pedicle subtraction osteotomy for tardy nerve palsy after osteoporotic
	vertebral fracture 430
	N. Yamamoto, et al., Dept. of Orthop. Surg., yachiyo Medical Center, Tokyo Women's medica
	University
2-3-F32-3	Surgical results of posterior spinal shortening for osteoporotic thoracolumbar vertebral collapse-
	investigation of prognosis factors
	A. Tachibana, et al., Keiyu Orthopedic Hospital Keiyu Spine Center
2-3-F32-4	Surgical result for paraparesis due to osteoporotic vertebral fracture 431
	K. Saita, et al., Dept. of Orthop. Surg., JIchi Medical Univ. Saitama Medical Center
2-3-F32-5	Long term results of posterior spinal shortening for the treatment of osteoporotic vertebra
	fractures ————————————————————————————————————
	H. Katoh, et al., Dept. of Orthop. Surg., Tokai University School of Medicine
2-3-F32-6	A modified iliac screw technique in the treatment of adult spinal deformity · · · · · · 432
	S. Odate, et al., Dept. of Orthop. Surg., Gakkentoshi Hospital

#### Break

# **Invited Lecture 8**

10:50~11	: 50	Moderator: Y. Toyama
2-3-IL8	Passion for the treatment of complicated spinal disorder	
	-future of the spine and spinal surgery	432
	Y. Matsuyama, Dept. of Orthop. Surg., Hamamatsu Univ. School of M	ledicine

#### Break

12:10~13:10

#### Luncheon Seminar 10

Moderator : S. Kikuchi

2-3-LS10	Autologous bone marrow mesenchymal stem cell therapy for spinal cord injury and related pain  433	
	7. Yamashita, Department of Orthopaedic Surgery, Sapporo Medical University School of Medicine, Sapporo, Japan	
	Break	
	Free Papers 33	
13:20~1	4:10 Moderator: D. Togawa	
	Osteoporotic vertebral fracture 7	
2-3-F33-1	New parameter as Risk factors for early adjacent vertebral fractures after BKP ·······433	
	J. Pak, et al., Dept. of Orthop. Surg., Kansai Medical Univ. Takii Hospital	
2-3-F33-2	Outcome using JOABPEQ of balloon kyphoplasty 434	
	Y. Yamamoto, et al., Dept. of Orthop. Surg., Tokai Univ. Oiso Hp.	
2-3-F33-3	Is balloon kyphoplasty superior to vertebroplasty? · · · · · · · 434	
	N. Yamamoto, et al., Dept. of Orthop. Surg., yachiyo Medical Center, Tokyo Women's medical	
	University	
2-3-F33-4	An evaluation of vertebral dynamic mobility after Balloon Kyphoplasty for osteoporotic vertebral	
	fracture	
	H. Nakayama, et al., Hitujigaoka Hospital	
2-3-F33-5	Vertebroplasty with posterior spinal fusion for osteoporotic vertebral fracture: Is improvement of	
	sagittal balance beneficial for QOL ···································	
	K. Katsumi, et al., Dept. of Orthopedic Surgery, Niigata University Medical and Dental General	
	Hospital	
2-3-F33-6	Outcome of the fixation and reduction in short segment using USS fracture system in combination	
	with vertebroplasty for thoracolumbar burst fracture ····································	
	H. Takeshita, et al., Dept. of Orthop. Surg., Saiseikai Shigaken Hospital	
	Free Papers 34	
14:10~1	5:00 Moderator: K. Sato	
	Lumbar spinal stenosis diagnosis/ Epidemiology	
2-3-F34-1	New clssification in lumbar spinal stenosis for conservative treatment according to hypertrophy of	
	ligamentum flavum · · · · · · 436	
	Y. Sakai, et al., Dept. of Orthop. Surg., National Center for Geriatrics and Gerontology	

2-3-F34-2	Incidence of Modic change in patient with lumber spinal canal stenosis and relation between Modic
	change and low back pain ····································
	S. Ohyama, et al., Dept.of Orthop.Surg.,Osaka City General Hospital
2-3-F34-3	Prevalence of developmental lumbar spinal stenosis and its correlation with sympton of spinal
	stenosis in a population-based magnetic resonance imaging study-he Wakayama Spine Study- $\cdots 437$
	H. Iwahashi, et al., Dept. of Orthop. Surg., Wakayama Medical University
2-3-F34-4	Association among lumbar spinal stenosis, skeletal muscle mass index, fall-experience and health-
	related QOL: a study of the Japanese general population $\cdots \cdots 438$
	E. Takasawa, et al., Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine
2-3-F34-5	Resistance factor of conservative therapy for the patients with lumber spinal stenosis
	S. Yuri, et al., Dept.of Orthop. Surg., Yamaguchi Rousai Hospital
2-3-F34-6	Influence of Cognitive Appraisals concerning Pain on Subjective Severity in Patients with Lumbar
	Spinal Stenosis · · · · · 439
	D. Higuchi, Department of Physical Therapy, Faculty of Health Care, Takasaki University of Health
	and Welfare

15:00~15:50	0 Moderator : N. Hosono
	Degenerative spondylolisthesis
2-3-F35-1	Evaluation of related factors to postoperative progression of degenerative spondylolisthesis in
	microendoscopic laminotomy 439
	K. Ikuta, et al., Dept. of Orthop. Surg., Karatsu Red Cross Hospital
2-3-F35-2	A comparative study of clinical outcomes between pedicle screw fixation and microendoscopic
	laminectomy for degenerative spondylo-listhesis · · · · · · · · · · · · · · · · · ·
	M. Morishita, et al., Souseikai ASAO General Hospital Spine Center
2-3-F35-3	$\label{eq:mid_energy} \mbox{Mid term outcomes of ME-MILD for degenerative spondylolisthesis} \cdots \cdots 440$
	K. Kurihara, et al., Dept.of Orthop.Surg.,Sapporo Medical Univ.School of Medicine
2-3-F35-4	Middle and long-term clinical outcome of MIS-TLIF for degenerative spondylolysthesis.
	Comparative study with conventional TLIF 441
	K. Ishii, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-3-F35-5	$Long \ term \ outcome \ of \ the \ posterior \ lateral \ fusion \ for \ lumbar \ degenerative \ spondylolisthesis \ \cdots \cdots \ 4410000000000000000000000000000000000$
	M. Oshima, et al., Dept. of Orthop. Surg., Nihon Univ. School of Medicine
2-3-F35-6	Postoperative clinical outcome of five years or more in patients undergoing posterior lumbar
	interbody fusion for lumbar degenerative spondylolisthesisFactors affecting the postoperative
	clinical outcome · · · · · · · · · · · · · · · · · · ·
	M. Kohno, et al., Department of Orthopaedic Surgery, Yokohama Ekisaikai Hospital

15:50~16:4	.0 Moderator : <b>T. Kanemura</b>
	Minimally invasive lateral interbody fusion
2-3-F36-1	Intraoperative neurophysiological monitoring during XLIF procedure · · · · · · · · · · · · · · · · · · ·
	H. Iwasaki, et al., Dept. of Orthop. Surg., Wakayama Medical University
2-3-F36-2	Effective countermeasure against neural complications using a novel finger-electrode device for
	XLIF procedure 443
	W. Narita, et al., Spine Surgery and Related Research Center, Nantan General Hospital
2-3-F36-3	A new surgical approach for prevention of femoral nerve injury in eXtreme Lateral Interbody
	Fusion procedure 443
	K. Ishii, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-3-F36-4	Surgical results and complications of eXtreme lateral interbody fusion · · · · · · · 444
	K. Ohmori, et al., Center for Spinal Surgery, Nippon Kokan Hospital, Kanagawa, Japan
2-3-F36-5	A study of XLIF cage position and positional relation between cages and large vessels in lumber
	spine 444
	N. Segi, et al., Dept. of Spine & Orthop. Surg., Konan Kosei Hospital
2-3-F36-6	The damage of psoas muscle in XLIF approach · · · · · · · · · · · · · · · · · · ·
	K. Kumabe, et al., Dept. of Spine & Orthop. Surg., Konan Kosei Hosp.
Room	4
	Morning Seminar 2
7:50~8:50	Moderator: <b>T. Tomita</b>
2-4-MS2	History of Japan MISt, next innovation! 445
	K. Sato, Dept. of Orthop. and Spine Surg., Japanese Red Cross society Nagoya Daini Hospital
	Break
	Free Papers 37
9:00~9:5	Moderator: Y. Yukawa
	Adult spinal deformity 1
2-4-F37-1	Sagittal spinal alignment in healthy subjects- gender difference and changes with aging446
	Y. Yukawa, et al., Dept. of Orthop. Surg., Chubu Rosai Hospital
2-4-F37-2	Degenerative change of spinopelvic sagittal alignment in population-based cohort -Wakayama
	Spine Study- 446
	Y. Asai, et al., Dept. of Orthopaedic Surgery, Wakayama Medical University



2-4-F37-3	The veletionship between a revel epigeneluis peremeter (T1 polyic engle global tilt) and health
Z-4-F 3 <i>1-</i> 3	The relationship between a novel spinopelvic parameter (T1-pelvic angle, global tilt) and health related QOL for high age volunteers
	T. Banno, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine
2-4-F37-4	TOEI Study: Relationship between Locomotiv Syndrome and elderly spinal deformity evaluated by
	Locomo 25 and SRS Schwab Classification 447
	D. Togawa, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine
2-4-F37-5	Ethnic variation in correlation between sagittal parameters and HRQOL (Comparison between
	Japanese and North American population) 448
	N. Hosogane, et al., Dept. of Orthop. Surg., National Defense Medical College
2-4-F37-6	Difference of sagittal alignment by age in adult spinal deformity patients
	T. Yasuda, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medecine
	Free Papers 38
9:50~1	0:40 Moderator: H. Taneichi
	Adult spinal deformity 2
2-4-F38-1	$Lower \ lumbar \ lordosis \ for \ ideal \ spinopelvic \ alignment \ \ in \ adult \ spinal \ deformity \cdots \cdots 449$
	T. Yasuda, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medecine
2-4-F38-2	Optimal lumbar lordosis angle to reconstruct pelvic position in a dult spinal deformity surgery $\cdots 449$
	Y. Yamato, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine
2-4-F38-3	Radiographic assessment for postoperative adult spinal deformity patients using a novel spinopelvic
	parameter 450
	T. Banno, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine
2-4-F38-4	Spinal deformity parameters affecting to QOL in postoperative adult spinal deformity patients $\cdots 450$
	S. Inami, et al., Dept. of Orthop. Surg., Dokkyo Medical Univ. School of Medicine
2-4-F38-5	Comparison examination of adult spinal deformity cases and single level PLIF cases about X-rays
	under operation and after an operation ————————————————————————————————————
	K. Fujita, et al., Yamanashi University Department of Orthopaedics
2-4-F38-6	Incidence and risk factor of O-T discordance in surgically treated patient with DLS $\cdots\cdots 451$
	M. Yagi, et al., Dept. of Orthop. Surg., NHO Murayama Medical Center
	Free Papers 39
10:40~1	1:30 Moderator: K. Hasegawa
	Adult spinal deformity 3
2-4-F39-1	Complications associated with XLIF ·······················452
	S. Tanaka, et al., Dept. of Orthop. Surg., Nagoya Univ. School of Medicine
2-4-F39-2	Lateral interbody fusion for adult deformity: 2-year follow-up and iliopsoas muscle measurement452
	D. Sakai, et al., Dept. of Orthop. Surg., Tokai Univ. School of Medicine

2-4-F41-1

2-4-F39-3	Percutaneous pedicle screw fixation in the lateral decubitus position using a self-developed
	application for smartphone in cases with XLIF procedure ··········453
	W. Narita, et al., Spine Surgery and Related Research Center, Nantan General Hospital
2-4-F39-4	Biomechanical comparative study of corrective surgery for adult degenerative lumbar kyphosis
	between OLIF, PSO and VCR······453
	H. Takaishi, et al., Institute of Med. Sci., Tokyo Medical University
2-4-F39-5	$A \ study \ of \ an atomical \ difficulty \ in \ Lateral \ Access \ Surgery \ \ (OLIF, XLIF) \ \ for \ adult \ spinal \ deformity,$
	etc
	M. Hoshino, et al., Sonoda Medical Institute, Tokyo Spine Center
2-4-F39-6	Intervertebral correction of spinal deformity in Oblique lateral interbody fusion454
	Y. Shiga, et al., Dept. of Orthop. Surg., Chiba Univ. School of Medicine

#### Break

#### Free Papers 40

13:20~14:10	Moderator: T. Toyone
	Adult spinal deformity 4
2-4-F40-1	A new surgical strategy for Adult spinal deformity with severe sagittal imbalance: Anterior
	posterior correction and fusion using LLIF 455
	T. Sakuma, et al., Dept. of Orthopedic Surgery, Seirei Sakura Citizen Hospital
2-4-F40-2	Analysis of the factors affecting lumbar segmental lordosis after lateral lumbar interbody fusion $\cdot$ 455 and $\cdot$
	B. Otsuki, et al., Dept. of Ortho. Sur., Graduate School of Medicine, Kyoto Univ., Kyoto
2-4-F40-3	Cancel
2-4-F40-4	Early outcomes and safety of elderly degenerative lumbar kyphoscoliosis surgery with XLIF $\cdots \cdot 456$
	H. Moridaira, et al., Dept. of Orthopedic Surgery, Dokkyo Medical University
2-4-F40-5	Comparison of surgical result of XLIF and PSO for degenerative spinal kyphosis
	H. Ohta, et al., Dept. of Orthopedic Surgery, Oita Orthopedic Hospital
2-4-F40-6	Reconstruction and clinical result of XLIF and PPS for degenerative lumbar kyphoscoliosis 457
	T. Ogura, et al., Spine Surgery and Related Research Center, Nantan General Hospital
	Free Papers 41
14:10~15:00	Moderator : E. Abe
	Adult spinal deformity 5



K. Watanabe, et al., Dept. of Orthop. Surg., Niigata Univ. School of Medicine

2-4-F41-2	Indication of L5-S1 fusion in degenerative lumbar scoliosis for postoperative normal sagittal balance
	458
	E. Abe, et al., Dept of Orthop. Surg. Akita Kousei Medical Center
2-4-F41-3	Risk factors for L5/S none-union and kyphosis following correction surgery for adult spinal
	deformity ·······459
	K. Otani, et al., Dept. of Orthop. Surg., Kudanzaka Hospital
2-4-F41-4	Lumbosacral fusion about adult spinal kyphoscoliosis deformity-Selection of the lowest instru-
	mented vertebra
	K. Nakamichi, et al., Keiyu Orthopedic Hospital Keiyu Spine Center
2-4-F41-5	Strategy of treatment for traumatic thoracolumber kyphotic spinal deformity: To gain good sagittal
	global balance in local operation · · · · · · 460
	K. Matsumoto, et al., Sonoda medical institute tokyo spine center
2-4-F41-6	Corrective surgery for adult spinal deformity with segmental translation and cantilever technique
	using reduction screws; minimum two years follow up
	K. Fukuda, et al., Dept. of Orthop. Surg., Saiseikai Yokohamashi Tobu Hospital

$15:00\sim15:50$	0 Moderator: <b>M. Iwasaki</b>
	Adult spinal deformity 6
2-4-F42-1	Clinical results and functional outcome of posterior 3 column osteotomies at L5 or the sacrum in
	adult spinal deformity patients ·········461
	H. Funao, et al., Dept. of Orthop. Surg., Kawasaki Municipal Hospital, Kanagawa, Japan
2-4-F42-2	$A study of surgical correction for kyphoscoliosis in patients with Parkinson's disease \\ \cdots \\ \cdots \\ 461$
	T. Sakuma, et al., Sonoda Medical Institute Tokyo Spine Center
2-4-F42-3	Surgical outcomes of adult kyphoscoliosis in patients over 65 years of age ·······462
	M. Iwasaki, et al., Dept. of Orthop. Surg., Osaka Rosai Hospital
2-4-F42-4	The global sagittal alignment after vertebral osteotomy for adult spinal deformity - Can we
	speculate the compensation of the unfused spine?- 462
	Y. Nakao, et al., Dept. of Orthopaedic. Surgery, Spine Center, Sanraku Hospital
2-4-F42-5	Can We Keep Lumbar Lordosis Acquired By Corrective Surgery For Adult Spinal Deformity $\cdots 463$
	K. Nakai, et al., Department of Orthopedic Surgery, Hamamatsu University School og Medicine
2-4-F42-6	Negative Impact on Bending Forward Actions After Corrective Long Fusion for Adult Spina
	Deformity 465
	D. Togawa, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine

15:50~16:40	0 Moderator : S. Sato
	Adult spinal deformity 7
2-4-F43-1	Investigative study of proximal junctional kyphosis after posterior corrective surgery for the
	patients with a dult spinal deformity $000000000000000000000000000000000000$
	A. Matsumura, et al., Dept. of Orthop. Surg., Osaka City General Hospital
2-4-F43-2	The change of sagittal spinal alignment started by loss of upper lumber lordosis according to aging.
	Y. Sato, et al., Dept. of Orthop. Surg., Jyuzen Memorial Hospital
2-4-F43-3	Operative procedure selection of our department for a dult spinal deformity $\cdots\cdots 465$
	S. Ebata, et al., Dept. of Orthop. Surg., Yamanashi Univ.
2-4-F43-4	$Association\ between\ sagittal\ spinopelvic\ alignment\ and\ lumbar\ degenerative\ spondylolisthesis\ in$
	patients with osteoarthritis of the hip $\cdots \cdots \cdots$
	T. Morimoto, et al., Dept.of Orthop. Surg., Faculty of Medicine, Saga University
2-4-F43-5	The Impact of the Change of Pelvic Obliquity After THA on the Coronal Alignment of the Spine. $466$
	Y. Abe, et al., Dept. of Orthop. Surg., Eniwa Hospital
2-4-F43-6	Sagittal spinopelvic alignment in patients after total hip or knee arthroplasty $\cdots\cdots 466$
	M. Tsukamoto, et al., Dept. of Orthop. Surg., Saga Univ.
	Break
	Evening Seminar 4
17:00~18:00	0 Moderator : <b>K. Takeshita</b>
2-4-ES4	Conservative treatments for low back pain disorders ····································
	S. Yabuki, Dept. of Orthop. Surg., Fukushima Medical Univ. School of Medicine
	Break
	Dicar
Room	5
	English Oral Session 1
9:00~10:00	0 Moderators: W. Tian
	N. Kawahara
2-5-E1-1	$Expression of alpha-2-delta-1 \ subunit \ at the lumbar \ spinal \ cord \ in \ spinal \ cord \ injury \ rats \ \cdots \cdots 467$
	K. Kusuyama, Dept. of Orthopaedic surgery, Hyogo College of Medicine

2-5-E1-2	Patterns of Cervical Disc Degeneration - Analysis of Magnetic Resonance Imaging of over 1,000
	Symptomatic Subjects
	A. Suzuki, et al., Dept. of Orthopaedic Surgery, Osaka City University
2-5-E1-3	The Prevalence Of Cervical Myelopathy Among Subjects With Narrow Cervical Spinal Canal In A
	Large Cohort: The Wakayama Spine Study ··········468
	K. Nagata, et al., Wakayama Medical University Kihoku Hospital
2-5-E1-4	The characteristics of cervical myelopathy and imaging studies of cervical spine in the elderly: The
	Wakayama Spine Study · · · · · · · · · · · · · · · · · · ·
	K. Nagata, et al., Wakayama Medical University, Kihoku Hospital
2-5-E1-5	The Risk of Vertebral Artery Injury in Cervical Spinal Dislocation Analyzed by CT Angiography 469
	K. Nagata, et al., Tokyo Metropolitan Bokutoh Hospital
2-5-E1-6	One versus Two-Level Treatment with Total Disc Replacement or Anterior Cervical Discectomy
	and Fusion ············470
	W.D. Bradley, et al., Texas Back Institute, Denton TX
2-5-E1-7	Five Year Results from a US FDA, Prospective, Randomized Clinical Trial of One-Level Cervical
	Total Disc Replacement
	W.D. Bradley, et al., Texas Back Institute, Denton TX

# English Oral Session 2

10:00~11:0	Moderators: TJ. Huang
	M. Tanaka
2-5-E2-1	Relation between lumbar spondylolisthesis and its association with symptomatic lumbar spinal
	stenosis in a population-based cohort: The Wakayama Spine Study ·······471
	Y. Ishimoto, et al., Spine Care Center, Wakayama Medical University Kihoku Hospital
2-5-E2-2	Correction of Kyphotic Deformity due to Tuberculous Spondylitis with Titanium Cylindrical Cages
	Filled with Autologous Bone Graft: Preliminary Report ··········471
	L. Widhiyanto, et al., Spine division, Orthopaedic & Traumatology Dept. Medical Faculty Airlangga
	University - Dr. Soetomo General Hospital, Surabaya, East Java, Indonesia
2-5-E2-3	Does The Facet Joint Violation When Inserting A Percutaneous Pedicle Screw Affect The Adjacent
	Segment Disorders? 472
	S. Arataki, et al., Okayama University Hospital
2-5-E2-4	How to Prevent Postoperative Paralysis from Thoracic ossification of posterior longitudinal
	ligament (OPLL) Surgery - Nationwide Multi-Institutional Study - · · · · · · · · · · · · · · · · · ·
	Z. Ito, et al., Nagoya University/JSSR Monitoring working group
2-5-E2-5	A Study of the Predictive Value of the Modified Tokuhashi Score in Metastatic Spinal Tumour
	Causing Cord Compression in a Southern Chinese Population · · · · · 473
	KK. Cheung, et al., Department of Orthopaedics & Traumatology, Tuen Mun Hospital

2-5-E2-6	Minimally invasive percutaneous endoscopic lumbar discectomy for athletes under local anesthesia
	······································
	SC. Jha, et al., Department of Orthopedics, The University of Tokushima
2-5-E2-7	Efficacy of the weak opioid, tramadol-acetaminophen in the NSAIDs uncontrollable chronic low
	back pain 474
	T. Imamura, Japan Labour Health Welfare Organization, Department of Orthopaedic Surgery
	Kyushu Rosai Hospital

#### Break

#### Luncheon Seminar 11

12:10~13:1	10 Moderator: T. F	Kanemura
2-5-LS11	Challenges with Pedicle Screw Fixation of Cervical Spine and Solutions using a D	ynamic Surgical
	Guidance (DSG) device ·····	474
	Heiko Koller, Werner Wicker Klinik, Bad Wildungen, Germany	

#### Break

13:20~14:3	10 Moderator: H. Yamada
	Pathology of spine and spinal cord disease
2-5-F44-1	Improvement in low back pain associated with lumbar spinal canal stenosis following spinal
	microendoscopic surgery 475
	H. Yamada, et al., Dept. of Orthop. Surg., School of Medicine, Wakayama Medical University
2-5-F44-2	The additional analysis regarding the prevalence of neuropathic pain with chronic pain related to
	lumbar spinal disorders 475
	S. Orita, et al., Dept. of Orthop. Surg., Chiba Univ. School of Medicine
2-5-F44-3	Epidemiology and pathogenesis of degenerative lumbar scoliosis · · · · · 476
	Y. lizuka, et al., Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine
2-5-F44-4	The discrimination between intra lumbar spinal stenosis and extra foraminal stenosis using
	Diffusion tensor imaging parameter 476
	Y. Eguchi, et al., Dept. of Orthop. surg, Shimoshizu National Hospital
2-5-F44-5	Diagnostic pathogenesis and surgical strategy for the spinal adhesive arachnoiditis · · · · · 477
	S. Asamoto, et al., Spine and spinal cord center, Mita Hospital, International University of Health
	and Welfare
2-5-F44-6	How much will sensory impairment in the upper extremity due to cervical myelopathy be improved
	by surgical intervention? (One-year prospective study)
	H. Miyamoto, et al., Dept. of Orthop. Surg., Kindai Univ. Faculty of Medicine



14:10~1	5:00 Moderator: H. Mihara
	Operative treatment etc
2-5-F45-1	Grading of neck involuntary motion and surgical results for cervical spondylotic myelopathy
	associated with athetoid cerebral palsy · · · · · · 478
	H. Mihara, et al., Dept. of Orthop. Surg., Spine Center, Yokohama Minami Kyosai Hospital
2-5-F45-2	Surgical outcome of posterior approach for thoracic disc herniation by using the surgical microscope  478
	Y. Yajiri, et al., Dept. of Orthop. Surg., Nagaoka chuo general hospital
2-5-F45-3	Treatment outcomes of posterior percutaneus pedicle screw fixation for thoracolumbar burst
	fracture 479
	T. Kikuchi, et al., Dept. of Orthop. Surg., Japanese Red Cross Kobe Hospital
2-5-F45-4	Role of Weekly Administered Teriparatide in Bony Union Enhancement after Posterior Lumbar
	Interbody Fusion for Osteoporosis Associated Lumbar Degenerative Disorders : A Prospective
	Randomized Multicenter Study ··········479
	S. Ebata, et al., Dept. of Orthop. Surg., Yamanashi Univ.
2-5-F45-5	Clinical results and accuracy evaluations of S2AIS insertion with O-arm Navigation ······480
	Y. Matsui, et al., Dept. of Othro. Surg., Steel Memorial Muroran Hospital
2-5-F45-6	Surgical results of piriformis syndrome ————————————————480
	K. Owashi, et al., Dept. of Orthop. Surg., Nihonkai General Hospital
	Free Papers 46
15:00~1	5:50 Moderator: M. Natsuyama
	Diagnosis/ Conservative therapy
2-5-F46-1	Do symptoms improve after myelography for patients with degenerative lumbar disease? $ \cdots \cdots 481 $
	T. Sakakibara, et al., Department of Spinal Surgery and Medical Engineering, Mie University
	Graduate School of Medicine
2-5-F46-2	The diagnosis of lumbar degenerative disc disease focused on a medical interview 481
	J. Tonosu, et al., Dept. of Orthop., Iwai Orthopaedic Medical Hospital
2-5-F46-3	Comparison study of clinical findings between lumbosacral foraminal stenosis and lumber canal
	stenosis ····················482
	Y. Takahashi, et al., Spine Center, Shizuoka Red Cross Shizuoka Hospital
2-5-F46-4	The effects of lumbar support on static standing workers with low back pain ·······482
	M. Tsukamoto, et al., Dept. of Orthop. Surg., Univ. of Occupational and Environmental Health Japan
2-5-F46-5	The incidence of rest leg pain in lumbar foraminal stenosis compared with lumbar canal stenosis $\cdot 483$
	T. Tanno, et al., Spine center, Matsudo Orthopaedic Hospital

2-5-F46-6	Systemic administration of anti-Interleukin-6 receptor antibody Tocilizumab improves intractable
	low back and leg pain · · · · 483
	T. Sainoh, et al., Department of Orthopaedic Surgery, Graduate School of Medicine Chiba University

15:50~16:4	0 Moderator: M. Kanamori
	Diagnosis / Evaluation 1
2-5-F47-1	Evaluation of age influence on surgical outcome of anterior cervical spine surgery for cervical
	compressive myelopathy using JOACMEQ 48/4
	K. Kawashima, et al., Dept. of Orthop. Surg., Gifu Univ. Graduate School of Medicine
2-5-F47-2	$Investigation of lower extremity function of cervical myelopathy patients using JOACMEQ \\ \cdots \\ \cdots \\ 4849$
	T. Hiramatsu, et al., Department of Orthopaedic Surgery, Graduate School of Biomedical & Health
	Sciences, Hiroshima University
2-5-F47-3	The characteristics of axial pain using QOL and psycological assessment in general population. $\cdots 485$
	K. Nagata, et al., Dept. of Orthopedic Surgery, Wakayama Medical University Kihoku Hospital
	Wakayama, Japan
2-5-F47-4	Satisfaction and correlative outcomes after cervical laminoplasty 485
	T. Yokoyama, et al., Dept. of Orthop. Surg., Odate Municipal General Hospital
2-5-F47-5	Assessment of dysphagia using EAT-10, a swallowing screening tool · · · · · · · 486
	C. Mannoji, et al., Dept. of Orthop. Surg., Chiba Aoba Mun. Hosp.
2-5-F47-6	Cost-utility of surgical treatment for patients with metastatic spinal tumor · · · · · · 486
	S. Miyazaki, et al., Department of Orthopaedic Surgery, Kobe University Graduate School o
	Medicine

#### Break

# **Evening Seminar 5**

17:00~18:0	0	Moderator : H. Haro
2-5-ES5	Measures for spinal operation with severe osteoporosis ·····	487
	M Hano Dent of Orthon Surg Machida Keisen Hospital	

#### Room 6

# Free Papers 48

9:00~9:5	Moderator : K. Yone
	Ossification of spinal ligament 1
2-6-F48-1	Relationship between bone mass and serum sclerostin levels in patients with ossification of posterior
	longitudinal ligament · · · · · · · 487
	M. Kashii, et al., Dept. of Orthop. Surg., Osaka Univ. Graduate school of Medicine
2-6-F48-2	Investigation into the severity of vertebral fracture next to consecutive bone union ······ 488
	Y. Hijikata, et al., Depatrment of Spine and Spinal Surgery, Shinkomonji Hospital, Kitakyushu,
	Fukuoka, Japan
2-6-F48-3	The prevalence of DISH and diabetes mellitus as a comorbidity in Japan ······488
	A. Hirasawa, et al., Dept. of Spine Center, Aichi Medical Univ., Nagakute, Aichi, Japan.
2-6-F48-4	Prevalence of diffuse idiopathic spinal hyperostosis (DISH); Chest CT-based study489
	K. Mori, et al., Dept. of Orthop. Shiga University of Medical Science
2-6-F48-5	Comparison of the rate of ankylosing hyperostosis of the spine, ossification of the posterior
	longitudinal ligament, and ossification of the nuchal ligmament between Caucasian and Asian · · · · 489
	T. Fujimori, et al., Department of Orthopedic Surgery, Sumitomo Hospital
2-6-F48-6	Association between obesity and the extent of ossification of the posterior longitudinal ligament $\cdot 490$
	M. Kano, et al., Dept. of Orthop. Surg., Sapporo Medical Univ. School of Medicine

9:50~10:40	Moderator : F. Suetsuna
	Ossification of spinal ligament 2
2-6-F49-1	$Surgical\ Outcomes\ of\ Cervical\ ossification\ of\ posterior\ longitudinal\ ligament \\ \cdots \\ \cdots \\ 490$
	T. Miyagawa, et al., Dept. of Orthop. Surg., Gifu Univ. School of Medicine
2-6-F49-2	The outcome of laminoplasty for patients with cervical myelopathy due to the K-line (-) type
	ossification of posterior longitudinal ligament 491
	S. Chin, et al., Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine
2-6-F49-3	$C2\ decompression\ methods\ preserving\ C2\ attached\ muscles\ for\ cervical\ OPLL\ extends\ to\ C2/3\ level and the constraints of the constrai$
	or higher 491
	F. Suetsuna, et al., Dept. of Orthop. Surg., Hachinohe City Hospital
2-6-F49-4	Study of aggravating factors for cervical ossification of posterior longuitudinal ligament $\cdots \cdots 492$
	K. Ito, et al., Department of Orthopaedic Surgery, Nagoya University Hospital, Graduate School of
	Medicine
2-6-F49-5	An analysis on clinical factors affecting rapid progression of symptoms of OPLL $\cdots \cdots 492$
	M. Kubota, et al., Department of Spinal Surgery, Kameda Medical Center, Kamogawa

10:40~11:3	Moderator : O. Nakai
	Ossification of spinal ligament 3
2-6-F50-1	Clinical assessment of multiple additional surgery for patients with spinal ligament ossification $\cdots 493$
	A. Wada, et al., Dept. of Orthop. Surg., Toho Univ. School of Medicine
2-6-F50-2	Surgical results of microscopic bilateral decompression via a unilateral approach for patients with
	thoracic myelopathy due to OLF
	S. Taniguchi, et al., Dept. of Orthop. Surg., Kansai Medical Univ. Takii Hospital, Osaka, Japan
2-6-F50-3	Long Term Outcome of Surgical Treatment for Middle-lower Thoracic Spinal Lesion due to
	Ossification of Spinal Ligament
	T. Tanaka, et al., Dept. of Orthop. Surg., Hirosaki Univ. Graduate School of Medicine
2-6-F50-4	Method of determination of surgical anterior decompression levels for thoracic ossification of
	posterior longitudinal ligament 495
	S. Shindo, et al., Dept. of Orthop. Surg., Kudanzaka Hospital
2-6-F50-5	Surgical results of ossification of ligamentum flavum of thoracic spine · · · · · · · · · · · · · · · · · · ·
	N. Nakata, et al., Dept. of Spine Surgery, JCHO Tokyo Yamate Medical Center
2-6-F50-6	Effect of changes in surgical strategy for ossification of longitudinal ligament in the thoracic spine -
	From viewpoint of application of posterior instrumentation
	K. Miyamoto, et al., Department of Regional Medicine and Musculoskeletal Science, Gifu University
	Graduate School of Medicine, Gifu, Japan

#### **Break**

$13:20\sim14:1$	0 Moderator: H. Murakami
	Cervical spinal alignment 1
2-6-F51-1	Factors affecting cervical sagittal balance after multilevel anterior cervical fusion $\cdots \cdots 496$
	R. Kadota, et al., Dept. of Orthop. Surg., Numadu City Hosp.
2-6-F51-2	Sagittal imbalance after cervical laminoplasty including cranium. 497
	K. Ishida, et al., Dept. of Orthop. Surg., Yokohama City University Medical Hosp.
2-6-F51-3	$Sagittal\ spinal\ alignment\ in\ patient\ with\ positive\ cervical\ imbalance\ by\ measuring\ global\ tilt\ angle$
	497
	H. Suzuki, et al., Dept. of Orthop. Surg., Tokyo Med. Univ.

2-6-F51-4	Impact of Apex Angle of Anterior Compressing Factor and Preoperative C2-C7alignment on
	changing of Pre to Postoperative Spinal Cord Alignment · · · · · · 498
	S. Kato, et al., Dept. of Orthop. Surg., Kantoh Rohsai Hospital
2-6-F51-5	A survey of cervical lordotic angle for adolescent idiopathic scoliosis -What is assosiate with
	malalignment?498
	K. Hayashi, et al., Dept. of Orthop. Surg., Osaka city Univ. School of Medicine
2-6-F51-6	A survey about the transition of cervical lordotic angle after collective fusion for adolescent
	idiopathic scoliosis – with a survey of relevant factor– — 499
	K. Hayashi, et al., Dept. of Orthop. Surg., Osaka city Univ. School of Medicine

14:10~15:00	Moderator: E. Tou
	Cervical spinal alignment 2
2-6-F52-1	Influence of the total spinal alignment on the incidence of postoperative cervical malalignment in
	cervical spondylotic myelopathy patients 499
	S. Kaneyama, et al., Dept. of Orthop. Surg., Kobe Rosai Hospital
2-6-F52-2	Analysis of Regional Cervical Alignments after Expansive Open-Door Laminoplasty for Cervical
	Spondylotic Myelopathy ····································
	A. Iwanami, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-6-F52-3	Changes of the cervical alignment after selective laminoplasty $\cdots\cdots 500$
	Y. Terashima, et al., Dept. of Orthop. Surg., Sapporo Medical Univ. School of Medicine
2-6-F52-4	Influence of sagittal alignment to cervical laminoplasty
	H. Itoh, et al., Dept. of Orthop. Surg., Iida Municipal Hospital
2-6-F52-5	$\label{thm:eq:condition} Evaluations of the cervical alignment before and after cervical laminoplasty \\ \cdots \\ \cdots \\ 501$
	M. Manabe, et al., Dept. of Orthop. Surg., Kobe Century Memorial Hospital
2-6-F52-6	Evaluation about the association between C2-7SVA (sagittal vertical axis) and clinical results of
	cervical laminoplasty 502
	M. Kato, et al., Dept. of Orthop. Surg., Osaka City General Hospital, Osaka, Japan

15:00~15:50	Moderator: F. Kato
	Cervical spinal trauma 1
2-6-F53-1	$Risc\ Factors\ of\ Abasia\ in\ Cases\ of\ Spinal\ Cord\ Injury\ without\ Bony\ Injury\ (SCIWOBI) -Analysis\ of\ Analysis\ of\$
	Conventional MR Imaging Findings- 502
	M. Komatsu, et al., Hokkaido Chuo Rosai Hospital, Spinal Cord Injury Center
2-6-F53-2	Cervical spinal cord injury and bradycardia as an inhibitor of rehabilitation · · · · · 503
	K. Yasui, et al., Dept. of Orthop. Surg, Spinal Cord Injury Center, Hokkaido Chuo Rosai Hospital

2-6-F53-3	Traumatic spondylolisthesis of the axis - treatment strategies and outcomes of 41 cases503
2-0-1 00-0	M. Watanabe, et al., Dept. of Orthop. Surg., Tokai Univ. School of Medicine
2-6-F53-4	The usefulness of dynamic radiography and computed tomography for cervical spine injury with
2-0-1 00-1	instability
	H. Koike, et al., Dept. of Orthop. Graduate School of Medical Science, Kyoto Prefectural University of
	Medicine, Kyoto
2-6-F53-5	Restoration Process of the Respiratory and Motor Function in the Spinal Cord Injury without
201000	Radiographic Abnormalities
	C. Ushiku, et al., Department of Orthopedic Surgery, Spinal Cord Injury Center, Hokkaido Chuo
	Rosai Hospital
2-6-F53-6	Study of the upper cervical spine injury in our hospital······505
	K. Amano, et al., Dept. of Orthop. Surg., Ibaraki Seinan Medical Center Hospital, Ibaraki
	Free Papers 54
15:50~1	6 ∶ 40 Moderator ∶ T. Ueta
	Cervical spinal trauma 2
2-6-F54-1	The study of early closed reduction for cervical spine fracture and dislocation505
	S. Yamada, et al., Dept.of Orthop.Surg.,Nagasakirousai Hospital
2-6-F54-2	Treatment outcome of cervical spinal fracture-dislocation injuries
	T. Kikuchi, et al., Dept. of Orthop. Surg., Japanese Red Cross Kobe Hospital
2-6-F54-3	A new entry point of C1 lateral mass screw via cervical posterolateral approach506
	T. Tokioka, et al., Dept. of Orthop. Surg., Kochi Health Sciences Center, Kochi, Japan
2-6-F54-4	Surgical treatment of canal stenosis with cervical vertebral body fracture by pedicle screws ····· 507
	K. Ito, et al., Dept. of Orthop. Surg., Chubu Rosai Hospital
2-6-F54-5	Characteristics of patients with a coronally-oriented vertical fracture of the posterior region of the
	C2 vertebral body 507
	Y. Tomomatsu, et al., Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine
2-6-F54-6	Radiological evaluation of spontaneous reduction of traumatic cervical dislocation ······ 508
	T. Maeda, et al., Dept. of Orthop. Surg., Spinal Injuries Center, Iizuka, Japan
Ro	om 7
	Free Papers 55
9:00~9	0 : 50 Moderator : M. Saito



2-7-F55-2	Intraoperative complications during posterior vertebral column resection for severe spinal
	deformities
	H. Iwai, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-7-F55-3	Risk factors of the ileus after scoliosis operation · · · · 509
	H. Tominaga, et al., Dept.of Orthop.Surg.,Kagoshima Univ.School of Medicine
2-7-F55-4	Lumbar spinal surgery in patients with Parkinson's disease - Analysis of 71 cases from a
	multicenter study
	H. Kimura, et al., Dept. of Orthop. Surg., Kyoto univ. School of Medicine
2-7-F55-5	$The rapeutic strategy for intraoperative bleeding during total en bloc spondylectomy \ \ (TES) \cdots \cdots 510$
	T. Ishii, et al., Dept. of Orthop. Surg., Kanazawa Univ.
2-7-F55-6	Preoperative evaluation of vertebral arteries and circle of Willis for cases of cervical dumbbell spinal
	cord tumors by 3-Dimentional CT angiography ······511
	Y. Matsumoto, et al., Dept. of Orthop. Surg. Kyushu-Univ. school of medicine

9 . 50~10	· 40 Moderator · K. Miyamoto
	Tumor 1
2-7-F56-1	Risk factors for surgical site infection after total en bloc spondylectomy ······511
	H. Hayashi, et al., Dep. of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa University
2-7-F56-2	The diagnostic strategy for patients with spinal metastases of unknown origin
	T. Hozumi, et al., Dept. of Orthop. Surg., Tokyo Metropolitan Komagome Hosp.
2-7-F56-3	Clinical outcome of surgical treatment for cervical dumbbell tumor in viewpoint of restoration of
	facet joint 512
	K. Miyamoto, et al., Department of Regional Medicine and Musculoskeletal Science, Gifu University
	Graduate School of Medicine, Gifu, Japan
2-7-F56-4	First symptoms and the laboratory tests that were an opportunity for the initial diagnosis of
	multiple myeloma-About a relation from the orthopedics
	Y. Katae, et al., Dept. of Orthop. Surg., Akaike Kyodo Clinic
2-7-F56-5	Posterolateral sulcus approach for spinal intramedullary tumor : Surgical indication and technique
	513
	T. Takami, et al., Department of Neurosurgery, Osaka City University Graduate School of Medicine
2-7-F56-6	New application of Piezo actuator-driven pulsed water jet device to intramedullary tumor surgery
	514
	T. Endo, et al., Dept. of Neurosurgery, Tohoku University

10:40~1	1:30 Moderator: K. Harimaya
	Tumor 2
2-7-F57-1	Spinal metastases of musculoskeletal sarcomas · · · · 514
	K. Harimaya, et al., Dept. of Orthopaedic Surg., Graduate School of Medical Sciences, Kyushu Univ.
2-7-F57-2	Assessment of clinical bone healing inside the titanium cage: comparison of autograft and frozen
	autograft treated by liquid nitrogen ······515
	K. Inoue, et al., Dept of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.,
	Kanazawa, Japan
2-7-F57-3	Effect of irradiation on dura mater and surrounding tissue
	N. Yokogawa, et al., Dept. of Orthop. Surg., Kanazawa Univ.
2-7-F57-4	Significance of intraoperative pathological diagnosis in spinal tumor
	K. Kobayashi, et al., Dept. of Orthopedic Surgery, School of Medicine, Nagoya University
2-7-F57-5	Treatment for reccurrent giant cell tumor of cervical spine with denosumab ·······516
	T. Tsukanishi, et al., Dept. of Orthop. Surg, Chiba Cancer Center
2-7-F57-6	Pancoast Tumor misdiagnosed as cervical spondylotic radiculopathy: Three cases report $\cdots\cdots 517$
	H. Kunizawa, et al., Dept. of Orthop. Surg., Japanese Red Cross Musashino Hospital
	Break
	Luncheon Seminar 12
12:10~1	3:10 Moderator: S. Konno
2-7-LS12	Investigation of chronic musculoskeletal pain in Japan ···································
	M. Nakamura, Department of Orthopaedic Surgery, Keio University School of Medicine, Tokyo,
	Japan
	Break
	Free Papers 58
13:20~1	4 · 10
13 · 20 - 1	
9.7 EE0.1	Spinal tumor 1 Surgical outcome for spinal metastasis of patients order than 70 years ······518
2-7-F58-1	
	K. Kakutani, et al., Department of Orthopaedic Surgery, Kobe University Graduate School of Medicine
2-7-F58-2	Clinical outcome of posterior pieceemeal total excision and en bloc corpectomy for spinal metastasis
	K. Yoshioka, et al., Dept. of Orthop. Surg., Kanazawa Univ. School of Medicine



2-7-F58-3	Long-term surgical results and treatment strategy of spinal metastases from differenciated thyroid
	carcinoma 519
	S. Kato, et al., Dept. of Orthop. Surg., Kanazawa Univ. School of Medicine
2-7-F58-4	Clinical outcomes in patients with giant cell tumor of the mobile spine
	N. Yokogawa, et al., Dept. of Orthop. Surg., Kanazawa Univ.
2-7-F58-5	The Application of Minimally Invasive Spine Stabilization (MISt) for Metastatic Spinal Tumors 520
	K. Nakanishi, et al., Dept. of Orthopedics, Traumatology and Spine Surgery., Kawasaki Medical
	School
2-7-F58-6	Aggressive surgical treatment with bony pelvic resection for locally recurrent rectal cancer ····· 520
	Z. Ito, et al., Dept. of Orthop. Surg., Nagoya Univ. School of Medicine

14:10~15:	: 00 Moderator : Y. Kasai
	Spinal tumor 2
2-7-F59-1	Two prognotic scoring systems for patients with metastatic spine tumor
	R. Sasaoka, et al., Dept.og Orthop Surg, Yodogawa Christian Hospital, Osaka, Japan
2-7-F59-2	Factors associated with prognosis of prostate cancer with spinal metastases
	T. Shiozaki, et al., Dept. of Orthop. Surg., Aomori Prefectural Central Hospital
2-7-F59-3	Duration of neurological symptoms can predict neurological recovery after palliative surgery for
	metastatic spinal tumor
	M. Ohashi, et al., Dept. of Orthop. Surg., Niigata University
2-7-F59-4	The clinical factors for the neurological function in metastatic thoracic spine tumors
	Y. Yasuda, et al., Dept. of Orthop. Surg., Univ. of Toyama
2-7-F59-5	Risk factors of surgical site infection after posterior fixation surgery and intraoperative
	radiotherapy for metastatic spine 523
	S. Sugita, et al., Dept. of Orthop. Surg., Tokyo Metro Hosp. Komagome
2-7-F59-6	Clinical Outcomes and satisfaction of palliative surgery for metastatic spinal disease
	T. Masuda, et al., Department of Orthopaedic Surgery, Gifu University Graduate School of Medicine

15:00~15:5	Moderator: N. Kawahara
	Spinal tumor 3
2-7-F60-1	Analysis of the factors for the palsy of vertebral metastasis ·········524
	H. Imabayashi, et al., Dept. of Orthop. Surg., National Defense Medical College
2-7-F60-2	The effect of nerve roots transection in total en bloc spondylectomy · · · · · · 524
	K. Shinmura, et al., Dept. of Orthop. Surg., Kanazawa Univ.

2-7-F60-3	Complications and postoperative course of Total En bloc Spondylectomy after palliative operation
	525
	N. Yonezawa, et al., Dept. of Orthop Surg, Kanazawa University Hospital
2-7-F60-4	Examination of the spinal seeding cases by metastatic tumor
	H. Kamoda, et al., Dept. of Orthop. Surg. Chiba Cancer Center
2-7-F60-5	Motor function of lower extremities after detachment of nerve roots in total en bloc spondylectomy
	of lower lumbar spine 526
	T. Ota, et al., Department of Orthopaedic Surgery, Kanazawa University Hospital
2-7-F60-6	Evaluation of SINS score for assesment of pathological fracture
	A. Iguchi, et al., Department of Rehabilitation Center, Showa University Northern Yokohama
	Hospital

Moderator: M. Fukuoka 15:50~16:40

	Spinal cord tumor
2-7-F61-1	Surgical outcome of spinal schwannoma – Gd enhancement imaging is associated with Mib-1 index-
	527
	K. Kobayashi, et al., Dept. of Orthopedic Surgery, School of Medicine, Nagoya University
2-7-F61-2	Surgical outcomes of tumor resection without fusion through posterior approach for cervical
	dumbbell tumors in subaxial lesion
	Y. Ishikawa, et al., Div. of Orthop. Surg., Niigata Univ. Graduate School of Medical and Dental
	Sciences
2-7-F61-3	Surgical outcomes for thoracic dumbbell tumors: is spinal fusion necessary?528
	T. Aizawa, et al., Dept. of Orthop. Surg., Tohoku Univ. School of Medicine
2-7-F61-4	Surgical outcome and postoperative neurologic deficits of en bloc tumor resection with cauda equina
	rootlets for cauda equina neurinoma
	Y. Takeshita, et al., Dept.of Spine and Orthop.Surg., Yokohama Rosai Hosp.
2-7-F61-5	Surgical results of spinal cord ependymoma- Study of recurrent cases529
	K. Kobayashi, et al., Dept. of Orthopedic Surgery, School of Medicine, Nagoya University.
2-7-F61-6	Surgical outcome of spinal meningioma by complete removal and complete coagulation of dural
	attachment ······529
	M. Kamata, et al., Dept.of Orthop, Surg., Keivu Hospital

# Room 8

9:00~9	9:50 Moderator: M. Machida
	Basic research 4
2-8-F62-1	Three-dimensional analysis of dynamic spino-pelvic sagittal balance in degenerative lumbar
	kyphoscoliosis·····530
	Y. Shiba, et al., Dept. of Orthop. Surg., Dokkyo Medical University
2-8-F62-2	Gait analysis for the risk of fall down in patients with cervical spondylotic myelopathy530
	K. Endo, et al., Dept. of Orthop. Surg., Tokyo Medical Univ.
2-8-F62-3	A gait analysis in patients with adult spinal deformity using a treadmill
	K. Ishii, et al., Niigata Spine Surgery Center
2-8-F62-4	Biomechanical evaluation of lumbar pedicle screw using cortical bone trajectory for spondylolytic
	vertebra·····531
	K. Matsukawa, et al., Department of Orthopaedic Surgery, National Defense Medical College
2-8-F62-5	Cancel
2-8-F62-6	The finite-element analysis of osteoporotic vertebral fracture with dynamic stabilization $\cdots\cdots 532$
	M. Fujii, et al., Dept. of Orthop. Surg., Kanazawa Univ. School of Medicine
	Free Papers 63
9:50~1	0:40 Moderator: <b>K. Nishida</b>
	Basic research 5
2-8-F63-1	Enhancement of bone formation with the adipose-derived regenerative cell in the large defect of the
	spine533
	K. Inoue, et al., Dept of Orthop. Surg., Graduate School of Medical Sciences, Kanazawa Univ.,
	Kanazawa, Japan
2-8-F63-2	An experimental quantitative assessment of BMP induced-soft tissue inflammation by 11.7T ultra
	high resolution MRI · · · · 533
	T. Morimoto, et al., Department of Orthopaedic Surgery, Osaka University Graduate School of
	Medicine
2-8-F63-3	Growth factor of preserved platelet-rich plasma ······ 534
	Y. Shiga, et al., Dept. of Orthop. Surg., Chiba Univ. School of Medicine
2-8-F63-4	Evaluation of resorption and biocompatibility of collagen hemostats in the spinal epidural space $\cdots 534$
	K. Mizuno, et al., Department of Orthopaedics, Graduate School of Medical Science, Kyoto
	Prefectural University of Medicine
2-8-F63-5	Identification of a novel susceptibility gene for adolescent idiopathic scoliosis ·······535



2-8-F63-6	Platelet-rich plasma and hydroxyapatite/collagen composite enhance bone union and formation
	about in rat posterolateral fusion model
	S. Rakuman, et al., School of Medicine, Chiba University.
	Free Papers 64
10:40~11	1:30 Moderator: K. Sairyo
	Lumbar spinal diagnosis/ Conservative therapy
2-8-F64-1	Lumbar Spondylolysis in Elementary School Children · · · · 53
	T. Sakai, et al., Dept. of Orthop. Surg., Tokushima Univ.
2-8-F64-2	A clinical study on conservative treatment for adolescent spondylolysis · · · · · 53
	K. Hatakeyama, et al., Funabashi Orthopedic Hospital
2-8-F64-3	Incidence and Treatment of lumbar spondylolysis in children and adolescents53
	N. lesato, et al., Obihiro Kyokai Hospital
2-8-F64-4	Termination of the conus medullaris on infant whole MRI associated with sacral dimples53
	S. Maekawa, et al., Dept. of Orthop. Surg., Kofu Municipal Hospital
2-8-F64-5	Complications associated with high magnetic field MRI ····· 53
	Y. Abe, et al., Dept. of Orthop. Surg., Eniwa Hospital
2-8-F64-6	MRI analysis of the iliopsoas muscle position: the relationship between sagittal spino-pelvi
	alignment. 53
	A. Kondo, et al., Dept. of Orthop. Surg., Eniwa Hospital.
	Break
	Luncheon Seminar 13
12:10~13	3:10 Moderator: Y. Kato
2-8-LS13	A strategy for prevention of osteoporotic fragile fractures
	S. Ichimura, Dept. of Orthop. Surg., Kyorin Univ. School of Medicine
	Break
	Free Papers 65
13:20~14	4:10 Moderator: T. Iguchi
	Epidemiology/Natural course 1
2-8-F65-1	The association of radiological findings with low back pain in osteoporotic vertebral fracture;
	multicenter prospective cohort study between 2012 and 201453
	S. Takahashi, et al., Dept. of Orthop. Surg., Osaka City Univ.

2-8-F65-2	Characteristics in MRI findings related to nonunion of osteoporotic vertebral fracture; a
	multicenter prospective cohort study between 2012 and 2014
	S. Takahashi, et al., Dept. of Orthop. Surg., Osaka City Univ.
2-8-F65-3	$Natural\ course\ of\ osteoporotic\ vertebral\ fracture\ based\ on\ MRI\ findings\ \ ;\ a\ multicenter\ prospective$
	cohort study between 2012 and 2014 $$
	S. Takahashi, et al., Dept. of Orthop. Surg., Osaka City Univ.
2-8-F65-4	The association between Modic chage and low back pain – the Wakayama Spine Study– $\cdots\cdots\cdots541$
	M. Teraguchi, et al., Wakayama Rosai Hosipital
2-8-F65-5	Radiological change of the paravertebral muscles of the lumbar spine relate with the C7 sagittal
	vertical axis – The Wakayama Spine Study · · · · 541
	H. Hashizume, et al., Dept. of Orthopaedic Surgery, Wakayama Medical University
2-8-F65-6	Aging change of the paravertebral muscles and psoas muscles of the lumbar spine and relation to
	the low back pain -The Wakayama Spine Study
	H. Hashizume, et al., Dept. of Orthopaedic Surgery, Wakayama Medical University
	Free Papers 66
14:10~1	5:00 Moderator: K. Otani
	Epidemiology/Natural course 2
2-8-F66-1	Natural course of LDH: analysis of 45 conservative cases which were detected absorption of the
	herniation in MRI ····· 542
	A. Aiba, et al., Dept. of Orthop. Surg., Numazu City Hospital
2-8-F66-2	$Long-term\ prognosis\ of\ hematogenous\ spine\ infection\ -survival\ rate, recurrence\ and\ QOL-\cdots\cdots 543$
	T. Kokabu, et al., Dept. of Orthop. Surg., Hokkaido Univ. Graduate School of Medicine
2-8-F66-3	$Incidence \ of \ hypertension \ correlates \ to \ worsening \ of \ sagittal \ global \ alignment \\ \cdots \cdots \cdots 543$
	H. Arima, et al., Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine
2-8-F66-4	Six-year follow-up of lumbar spinal stenosis in the community evaluated by MRI $\cdots \cdots 544$
	K. Otani, et al., Dept. of Orthop. Surg., Fukushima Medical Univ. School of Medicine
2-8-F66-5	$Epidemiological  Study  of  Lumbar  Spinal  Stenosis  \vdots  10-year  Community  Follow-up \cdots \cdots 544$
	T. Igari, et al., Department of Orthopaedic Surgery, Fukushima Medical University School of
	Medicine
2-8-F66-6	Natural history of degenerative lumbar scoliosis with over 30 degree Cobb angle $\cdots\cdots 545$
	Y. Ishihara, et al., Asao General Hospital Spine Center
	Free Papers 67
15:00~1	5:50 Moderator: O. Shirado
	Epidemiology 1
2-8-F67-1	Associations between standing posture and low back pain. The GAINA study545
	S. Tanishima, et al. Dept. of Orthon Surg. Tottori Univ. Faculty of Medicine

 $15:50\sim16:40$ 

2-8-F67-2	The curative effect of the lumbar operation to leg numbness -prospective study546
	H. Oba, et al., Dept. of Orthop. Surg., Yodakubo Hospital
2-8-F67-3	Feature of lumbar spinal canal stenosis kept the disc height
	T. Yano, et al., Dept. of Orthop. Surg., Hyogo Rehabilitation Center Hospital
2-8-F67-4	An analysis of factors affecting visual analog scale (VAS) score of back pain in lumbar spinal disease
	K. Yoshioka, et al., Dept of Orthop. Surg. Keio Univ School of Medicine
2-8-F67-5	Impact of disk space narrowing and osteophytosis on pain at lumbar spine · · · · · 547
	S. Muraki, et al., Dept. of Clinical Motor System Medicine, 22nd Century Medical and Research
	Center, Univ. of Tokyo
2-8-F67-6	Clinical Features of Thoracic Spinal Stenosis-associated Myelopathy
	K. Ando, et al., Dept. of Orthop. Surg., Nagoya Univ. School of Medicine

#### Free Papers 68

Moderator: S. Imagama

Epidemiology 2 2-8-F68-1 Frailty is related to spinal inclination and negative QOL in health checkup ......548 S. Imagama, et al., Dept. of Orthop. Surg., Nagoya Univ. Graduate School of Medicine 2-8-F68-2 Relationship between low back pain evaluated with Roland-Morris Disability Questionnaire (RDQ) and quality of life (QOL) in aged community dwelling ......549 Y. Kasukawa, et al., Dept. of Orthop. Surg., Akita Univ. School of Medicine 2-8-F68-3 Analysis of difference of QOL and related factors between low back pain and other pain in the S. Yabuki, et al., Dept. of Orthop. Surg., Fukushima Medical Univ. School of Medicine 2-8-F68-4 The association between spinopelvic sagittal alignment and low back pain in population-based cohort-Wakayama Spine Study------550 Y. Asai, et al., Dept. of Orthopaedic Surgery, Wakayama Medical University 2-8-F68-5 Evaluation of a spino-pelvic sagittal alignment in 234 patients with lumbar canal stenosis .......550 M. Kato, et al., Dept. of Orthop. Surg., Osaka City General Hospital, Osaka, Japan 2-8-F68-6 Influence of Vertebral Compression Fracture upon Adult Spinal Deformity: Cross-Sectional Cohort 

I. Senoo, et al., Dept. of Orthop. Surg., Asahikawa Medical Univ.

#### Poster Room

15:30~1	6:00 Moderator: T. Fujimoto
	Diagnosis 1
2-P22-1	MRI features of disc degeneration and vertebral fracture in patients with degenerative lumbar
	paraspinal muscles · · · 551
	K. Takayama, et al., Dept. of Orthop. Surg., Seikeikai Hospital
2-P22-2	Evaluation of the Cross Sectional Area of the Psoas Major, Multifidus and Erector Spinae in
	Operated Patients: Magnetic Resonance Imaging Study
	Y. Hatakeyama, et al., Dept. of Orthop. Surg., Nakadori General Hospital
2-P22-3	Does lumbar intervertebral disc degeneration affect psoas major muscles?552
	T. Kita, et al., Dept. of Orthop. Surg., Seikeikai Hospital
2-P22-4	Relation to the Japanese Orthopaedic association back pain evaluation questionnaire (JOABPEQ)
	and fatty degeneration of paravertebral muscle using MR spectroscopy553
	H. Takashima, et al., Div. of Radiology and Nuclear Medicine, Sapporo, Japan
2-P22-5	Dynamic change of lumbar degenerative spondylolisthesis on axial loaded MRI: The correlation
	with severity of clinical symptoms······553
	H. Kanno, et al., Dept. of Orthop. Surg., Tohoku Univ. School of Medicine
2-P22-6	Nerve root sedimentation sign in lumbar spinal stenosis
	H. Hosoe, et al., Dept. of Orthop. Surg., Gifu Prefectural General Medical Center
	Poster 23
16:00~1	6:30 Moderator: Y. Yoshida
	Diagnosis 2
2-P23-1	Morphological characteristics of the vertebral bodies that have neurological disturbances with
	osteoporotic vertebral fractures ·········554
	F. Saiki, et al., Dept.of Orthopedics, Yokohama Rosai Hosp.
2-P23-2	Is it possible to detect the osteoporotic vertebral fracture using multi detector computed
	tomography? -ex-vivo and in-vivi studies555
	M. Machida, et al., Clinical Research Center, NHO Murayama Medical Center
2-P23-3	The association of MRI findings with compressed vertebral mobility in osteoporotic vertebral
	fracture; a multicenter prospective cohort study between 2012 and 2014555
	S. Takahashi, et al., Dept. of Orthop. Surg., Osaka City Univ.
2-P23-4	The relationship between the clinical symptom and radiographic finding of osteoporotic vertebral
	fracture with intravertebral cleft · · · · · 556
	T. Nakamae, et al., Dept. of Orthop. Surg., JA Hiroshima General Hospital, Hatsukaichi, Japan

2-P23-5	$Inter-observer\ agreement\ of\ assessment\ of\ vertebral\ fracture\ using\ semi\ quantitative\ method \cdots 5560000000000000000000000000000000000$
	J. Yamada, et al., Department of Orthopedic Surgery, Mie University Graduate School of Medicine
2-P23-6	Mechanical analysis of vertebra compression fracture using finite element method
	H. Takano, et al., Department of Orthopedic Surgery, Juntendo University School of Medicine

15:30~16:00	Moderator: S. Nobuto
	Diagnosis 3
2-P24-1	Age-related changes in alignment, and range of motion of upper and lower cervical spine: A study
	of radiographic data from 600 asymptomatic subjects $\cdots 557$
	T. Inoue, et al., Dept. of Orthop. Surg., Chubu Rosai Hosp
2-P24-2	Age-related changes in sagittal vertical axis of the cervical spine : A study of radiographic data
	from 600 asymptomatic subjects $\cdots 558$
	T. Inoue, et al., Dept. of Orthop. Surg., Chubu Rosai Hosp
2-P24-3	The new index of developmental cervical canal stenosis based on X-ray558
	Y. morimoto, et al., Dept. of Orthop. Surg., Nara Medical University
2-P24-4	Dynamic Changes of Cervical Spinal Cord Compression Evaluated by Kinematic Computed
	Tomography Myelography 559
	S. Murase, et al., Dept. of Orthop. Surg., Yokohama Rosai Hospital, Yokohama, Japan.
2-P24-5	Evaluation of cervical foraminal stenosis using herical computed tomography scans of 120
	degenerative spondylotic cases 559
	K. Nishioka, et al., Dept. of Neurological Surg., Wakayama Medical Univ.
2-P24-6	Screw perforation features in 140 consecutive patients performed cervical pedicle screw insertion
	using pre-operative CT-based navigation system ·······560
	M. Uehara, et al., Dept. of Orthop. Surg., Shinshu Univ. School of Medicine
	Doctor 25

16:00~16:3	0 Moderator: <b>T. Yara</b>
	Diagnosis 4
2-P25-1	The image diagnostic classification using MR T2 increased signal intensity in cervical spondylotic
	myelopathy
	M. Machino, et al., Dept. of Orthop. Surg., Nagoya University Graduate School of Medicine
2-P25-2	Radiological features of cervical spondylotic myelopathy and neurosarcoidosis in Magnetic
	resonance imaging
	M. Morozumi, et al., Department of Orthopaedic Surgery, Nagoya University Graduate School of
	Medicine

	S. Dohzono, et al., Department of Orthopaedic Surgery, Osaka City University Graduate School	of
	Medicine, Osaka, japan	
2-P25-4	MRI image analysis of the improvement cases of cervical symptoms by the adjusted pillow	
	Observation of cervical alignment and subarachnoid space of lesion	32
	S. Yamada, et al., 16 Gou Seikeigeka	
2-P25-5	Quantitative assessment of improvement of cervical symptoms using the adjusted pillow in slee	_
	50	32
	S. Yamada, et al., 16 Gou Seikeigeka	
2-P25-6	Clinical applications of Tomosynthesis imaging for spinal lesions and surgeries	33
	R. Tamaki, et al., Dept. of Orthop.Surg., Tokyo Women's Medical Univ.	
	Poster 26	
15:30~	16:00 Moderator: E. Wada	
	Diagnosis 5	
2-P26-1	Clinical utility of stabilometer for deep sensory of lower extremity in cervical myelopathy5	63
	T. Izumi, et al., Spine Center, Orthopedic Department Niigata Central Hospital	
2-P26-2	Quantitative evaluation using walking analysis with eyes open and closed in cervical compression	on
	myelopathy -comparison pre- to postoperative evaluation 50	64
	K. Nakamichi, et al., Keiyuu Orthopaedic Hospital	
2-P26-3	Which test should we choose for assessment of lower extremities function in cervical myelopath	
	50	64
	T. Yokoyama, et al., Dept. of Orthop. Surg., Odate Municipal General Hospital	
2-P26-4	Is the three-dimensinal motor analysis a useful evaluation for diagnosis and treatment in spine ar	
	spinal disorders 50	35
	M. Machida, et al., Clinical Research Center, NHO Murayama Medical Center	
2-P26-5	Pain reduction test is method of the diagnosis of low back pain applied manual therapy5	65
	T. Narita, et al., Dept.of Phisical Therapy, Health Science Univ.	
2-P26-6	Examination of muscular pressure pain about radicular leg pain due to lumbar disc herniation ··· 50	66
	Y. Kuroda, et al., Dept. of Orthop. Surg., Kansai-Rosai Hospital., Amagasaki city., Japan	
	Poster 27	
16:00~	16:30 Moderator: K. Nakanishi	
	Diagnosis 6	
2-P27-1	Clinical characteristic of L1 nerve root disturbance	66
	T. Kido, et al., Dept. of Orthop. Surg., Akita Rosai Hospital	

2-P25-3

2-P27-2	Relation between leg pain at rest and spinal nerve swelling in lumbar foraminal stenosis567
	K. Yamada, et al., Dept. of Orthop. Surg., Yokohama City Univ.
2-P27-3	Clinical characteristics of cervical myelopathy in young adults (under the age of 40)567
	T. Kusakabe, et al., Dept. of Orthop. Surg., Tohoku Rosai Hospital
2-P27-4	Cervical myelopathy without exaggerated patellar tendon reflex depends on peripheral
	neuropathy? · · · · 568
	K. Nishida, et al., Dept. of Orthop. Surg., Hiroshima Prefectural Hospital
2-P27-5	Characteristics and surgical outcomes of cervical spine injury in ankylosing spinal disorder : A
	multicenter retrospective study
	H. Tashi, et al., Spine Center, Dept. of Orthop. Surg., Niigata Central Hospital
2-P27-6	When, how to assess the patients with spinal cord injuries? 569
	H. Sakai, et al., Spinal Injuries Center, Fukuoka, Japan
	Poster 28
15:30~	16:00 Moderator: <b>T. Maeda</b>
	Cervical spinal cord injury
2-P28-1	Evaluation for the bradycardia after cervical spinal cord injury with autonomic nerve function test
	N. Ishikawa, et al., Akita Red Cross Hospital
2-P28-2	Evaluation of neurological and functional classification systems of cervical spinal cord injury570
	O. Kawano, et al., Dept. of Orthop. Surg., Spinal Injuries Center
2-P28-3	An aggressive management for ASIA A or B cervical spinal cord injury
	K. Inokuchi, et al., Dept. of Emerg. and Crit. Care Med., Saitama Med. Center, Saitama Med. Univ.
2-P28-4	Usefulness of the Subaxial Cervical Spine Injury Classification System for subaxial cervical spine
	trauma involved cervical spinal cord injuries without bony injury
	Y. Sorimachi, et al., Dept. of Orthop. Surg., Japanese Red Cross Maebashi Hospital
2-P28-5	The clinical influence of cervical spinal canal stenosis on the neurological outcome after traumatic
	cervical spinal cord injury without major fracture or dislocation
	T. Takao, et al., Dept. of Orthop. Surg., Spinal Injuries Center
2-P28-6	Analysis of Medical Costs of Acute Cervical Spinal Cord Injury
	M. Kato, et al., Dept. of Orthop. Surg., National Hospital Organization, Tokyo Medical Center
	Poster 29
	. 50.0. =0
16:00~	
2 D20 1	Vertebral artery  The diameter of transporter forement consists with the tof yearts had extract and are in an exploration.
2-P29-1	The diameter of transverse foramen correlate with that of vertebral artery and age: an evaluation
	with the computed tomography angiography

2-P29-2	Analysis of C7 transverse foramen and vertebral artery by neck CT angiography573
	T. Oshigiri, et al., Dept. of Orthop. Surg., Sapporo Medical Univ.
2-P29-3	The feature of C7 transverse foramen passage blood vessel by neck CT angiography573
	T. Oshigiri, et al., Dept. of Orthop. Surg., Sapporo Medical Univ.
2-P29-4	Vertebral Artery Injury Risk in Cervical Spine Surgery-Based on the Results of Measurement in
	1.000 Japanese Normal Subjects574
	N. Wakao, et al., Spine Center, Aichi Medical University.
2-P29-5	Redefining High-riding vertebral artery from the perspective of trajectory of C2 pedicle screw $\cdot\cdot$ 574
	S. Maki, et al., Dept. of Orthop. Surg, Chiba Univ. Graduate School of Medicine
	Poster 30
15:30~	16:00 Moderator: H. lizuka
	Surgical planning
2-P30-1	A study of an operative method for open door laminoplasty with an autograft spacer from C6
	spinous process 575
	S. Konishi, et al., Dept. of Orthop. Surg.,Osaka General Hospital of West Japan Railway Company
2-P30-2	A New Method for Evaluation of Sagittal Axis during Posterior Cervical Surgery: Intra-operative
	Trunk Axis (T-axis) by the means of Pre-operative C7 slope
	N. Manabe, et al., Gunma Spine Center (Harunaso Hospital)
2-P30-3	Dissection technique of the lateral wall of vertebral body and disc
	S. Sano, et al., Spine Center, Sanraku Hospital
2-P30-4	A study on optimal starting point of sacral alar-iliac screws in adult deformity 576
	N. Watanabe, et al., Department of Orthopaedic Surgery of Okayama University of Medicine
2-P30-5	Free-hand sacral-alar-iliac (SAI) screw placement using a guide pin parallel to the sacral
	tuberosity ······· 577
	Y. Tatara, et al., Spine center, Yokohama minami kyousai hospital
2-P30-6	Long-term results of the pedicle screw fixation that poured calcium phosphate cement in a pedicle
	screw aperture for the osteoporotic vertebra fracture cases ······ 577
	T. Fujiyoshi, et al., Dept. of Orthop. Surg., Kimitsu Chuo Hosp., Kisarazu, Chiba, Japan
	Poster 31
16:00~	16:30 Moderator: Y. Kato
	Basic research 1
2-P31-1	Screw surface and biomechanical analyses of bioactive pedicle screw
	K. Akeda, et al., Dept. of Orthop. Surg., Mie Univ. Graduate School of Medicine
2-P31-2	Use of CT value for assessing pedicle screw pullout strength · · · · · 578
	A. Ikeura, et al., Dept of Orthopaedic Surgery, Kansai Medical University
2-P31-3	Cancel



2-P31-4	The relationship between the pedicle expansion rate and the biomechanical stability of the screws
	placed in expanded pedicle
	K. Kubota, et al., Dept. of Orthopaedic Surg., Graduate School of Medical Sciences, Kyushu University
2-P31-5	Hounsfield unit on pedicle screw trajectory is a predictor for loosening of pedicle scre ·····580
	Y. Matsuo, et al., Department of Orthopaedic Surgery, Osaka University Graduate School of Medicine
2-P31-6	Biomechanical Evaluation of the Suture Anchors Used in Open-Door Laminoplasty : A Cadaveric Study
	Y. Kurokawa, et al., Dept. of Orthop. Surg., Misugikai Satou Hospital, Osaka, Japan
	Poster 32
15:30~	15:55 Moderator: T. Ogata
	Basic research 2
2-P32-1	$Inhibitory\ effect\ of\ hyaluronidase-4\ in\ a\ rat\ spinal\ cord\ hemisection\ model\cdots\cdots 581$
	Y. Shimizu, et al., Dept. of Orthop. Surg., Kanazawa Med. Univ., Kahoku, Japan
2-P32-2	Transplantation of human iPS cell-derived oligodendrocyte precursor for chronic spinal cord injury
	in adult mice·····581
	S. Kawabata, et al., Dept. of Orthop. Surg., Keio Univ.
2-P32-3	Study of cell transplantation using Schwann cell-sheet from rat's sciatic nerves for spinal cord injuries
	T. Inada, et al., Dept. of Orthopaedic Surgery, Graduate School of Medicine, Chiba University
2-P32-4	The effectiveness of pre-treatment with gamma-secretase inhibitor for dangerous neural progenitor cells derived from human iPS cells582
	T. Okubo, et al., Department of Orthopedics Surgery, Keio University School of Medicine
2-P32-5	Immunogenicity of human induced pluripotent stem cells-derived neural stem cells583
	M. Ozaki, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
	Poster 33
16:00~	16:30 Moderator: <b>A. Kimura</b>
	Basic research 3
2-P33-1	Rapamycin Suppresses Microglial Activation and Inflammation and Improves Locomotor and
	Sensory Functions after Spinal Cord Injury in Mice
	S. Tateda, et al., Department of Orthopaedic Surgery, Tohoku University Graduate School of
	Medicine, Sendai, Japan
2-P33-2	The behavior of hematogenous macrophage and resident microglia at lesion and lumbar enlargement of injured spinal cord······584
	H. Nakajima, et al., Dep. of Orthop. and Rehabil. Med., Univ. of Fukui Faculty of Medical Sciences



2-P33-3	Low-energy Extracorporeal Shock Wave Therapy Promotes Angiogenesis and Improve Locomotor
	and Sensory Functions after Spinal Cord Injury
	K. Yahata, et al., Department of Orthopaedic Surgery, Tohoku University of Medicine
2-P33-4	$Anti-Inflammatory\ Effect\ of\ Hepatocyte\ Growth\ Factor\ in\ Acute\ Phase\ of\ Spinal\ Cord\ Injury\ \cdots 5850000000000000000000000000000000000$
	K. Yamane, et al., Dept. of Orthop. Surg., Okayama Univ. School of Medicine
2-P33-5	Neuroprotection and neovascularization of adipose-derived mesenchymal stem cell transplantation
	for the acute spinal cord injury
	A. Yoshida, et al., Department of Orthopaedics and Rehabilitation Medicine Faculty of Medical
	Science, The University of Fukui
2-P33-6	Axon regeneration and motor function improvement with scaffold-free BMSC sheet transplantation
	to completely transected spinal cord rat
	A. Okuda, et al., Dept. of Orthop. Surg., Nara Medical University

15 . 50	10 · 00 Moderator · S. Onta
	Basic research 4
2-P34-1	The damage of white matter in aged spinal cord is severe after spinal cord injury586
	K. Kamiya, et al., Dept. of Orthopedic Surgery, Chiba University Graduate School of Medicine
2-P34-2	Mechanism of forelimb motor function restoration in rats with cervical spinal cord hemisection-
	Neuroanatomical validation587
	H. Ohne, et al., Dept.of Orthop. Surg., Kyorin Univ. School of Medicine
2-P34-3	The examination of histological change of back muscle injury in rats587
	K. Abe, et al., Dept of Orthop Surg, Graduate School of Medicine, Chiba Univ
2-P34-4	Anatomical study of middle cluneal nerve around sacroiliac joint ······ 588
	T. Konno, et al., Department of Orthopaedic Surgery, Yokohama City University Graduate School of
	Medicine
2-P34-5	Down-regulation of Trk and failure of retinol metabolism may be involved in pathogenesis of
	congenital scoliosis: gene expression analysis of congenital kyphoscoliotic rat588
	D. Tsunoda, et al., Department of Orthopaedic Surgery, Graduate School of Medicine, Gunma
	University
2-P34-6	Transplantation of activated nucleus pulposus cells for degenerated intervertebral discs: Analysis
	of activated nucleus pulposus cells after cryopreservation post transplantation589
	T. Nukaga, et al., Dept. of Orthop. Surg., Tokai Univ. School of Medicine

16:00~	16:30 Moderator: H. Sudo
	Basic research 5
2-P35-1	Anti-inflammatory effect of adiponectin on the intervertebral disc cells589
	Y. Terashima, et al., Department of Orthopaedic Surgery, Kobe University Graduate School of
	Medicine
2-P35-2	Is Discography or Discoblock Safe for Intervertebral discs?
	K. Iwasaki, et al., Department of Orthopaedic Surgery Hokkaido University Graduate School of
	Medicine
2-P35-3	Herniated and spondylotic intervertebral discs of the human cervical spine: histological and
	immunohistological findings in 707 en bloc surgical samples590
	A. Yamagishi, et al., Dept.of Orthop. Surg, Fukui Univ. School of Medicine
2-P35-4	Association between RANK/RANKL signal and proinflammatory cytokines in the rat interverte-
	bral disc cells · · · · 591
	N. Takegami, et al., Dept. of Orthop. Surg., Mie Univ. Graduate School of Medicine
2-P35-5	Effect of bone marrow stromal cell intravenous injection on degenerated intervertebral disc in rat
	591
	T. Morimoto, et al., Department of Orthopaedic Surgery, Osaka University Graduate School of
	Medicine
2-P35-6	Intervertebral disc regeneration with TEC(Tissue Engineered Construct) derived from adipose-
	derived msenchymal stem cells in rat tail model · · · · 592
	T. Morimoto, et al., Department of Orthopaedic Surgery, Osaka University Graduate School of
	Medicine
	Poster 36
15:30~	16:00 Moderator: S. Kobayashi
	Basic research 6
2-P36-1	Function of Brachyury in notochoral cell······592
	N. Fujita, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-P36-2	Molecular function of Follistatin-like protein 1 in the notochordal cell · · · · 593
	R. Watanabe, et al., Dept. of Orthop. Surg., Keio Univ. School of Medicine
2-P36-3	The efficacy of anti-NaV1.7 on sensory nervous system in rat model of intervertebral disk injury
	D. Nojima, et al., Dept of Orthop Surg, Graduate School of Medicine, Chiba Univ.
2-P36-4	The effect for the neuropathic pain of the serotonin noradorenaline reuptake inhibitor by nucleus
	pulposus applied on the nerve root in rats · · · · 594
	J. Handa, et al., Department of Orthopaedic Surgery, Fukushima Medical University School of

Medicine

2-P36-5	A basical study about neuropathic pain with chronic compression spinal cord model (twy mouse)
	N. Takeura, et al., Department of Orthopedic and Rehabilitation Medicine, The Univercity of Fukui.
	Fukui, Japan
2-P36-6	Basic study underlying activation of microglia and macrophages for spinal cord related pain 595
	K. Uchida, et al., Dept. of Orthop. Surg., Fukui Univ.

$16:00\sim16:2$	5 Moderator: H. Suzuki
	Basic research 7
2-P37-1	Prostaglandin IP agonist promotes osteoblastic differentiation and BMP induced bone formation 595
	S. Kanayama, et al., Department of Orthopedic Surgery, Osaka University
2-P37-2	Effect of Prostaglandin EP-4 agonist on bone formation in a rat spinal fusion with autograft model
	S. Kanayama, et al., Department of Orthopedic Surgery, Osaka University
2-P37-3	Histologic study of bone formation with spinal reconstruction using liquid nitrogen frozen bone $\cdots$ 596
	K. Shinmura, et al., Dept. of Orthop. Surg., Kanazawa Univ.
2-P37-4	Impact of frictional heat by high speed drill to nerve root · · · · · · 597
	K. Tamai, et al., Department of orhtopedics surery, Osaka City University Graduate School of
	Medicine, Osaka, Japan
2-P37-5	Preoperative oral rehydration therapy for subjects undergoing planned spine surgery597
	Y. Takahashi, et al., Spine Center, Shizuoka Red Cross Shizuoka Hospital

$15:30\sim 16:0$	0 Moderator: H. Yonemura
	Specific disease/Treatment
2-P38-1	Epidemiological study of congenital cervical synostosis
	Y. Harada, et al., Dept. of Orthop. Surg., Hakodate Municipal Hospital
2-P38-2	Cervical spine lesion in chondrodysplasia punctata –a report of 4 cases –
	Y. Takeshita, et al., Dept.of Spine and Orthop.Surg., Yokohama Rosai Hosp.
2-P38-3	Adjacent disease for cervical vertebral fusion · · · · · 599
	K. Shimizu, et al., Dept. of Orthop. Surg., Sano Kosei General Hospital
2-P38-4	Reconstruction of shoulder and elbow function using multiple muscle transfer for cervical
	spondylotic amyotrophy
	H. Yonemura, et al., Dept.of Orthop. Surg., Ogori Daiichi General Hospital
2-P38-5	Outcomes of Surgery for Tight Filum Terminale-Comparison between Adolescent and Manhood
	and Old and Middle-age ······600
	J. Suga, et al., Department of Orthopaedic Surgery, Kohseichuo Hospital

2-P38-6 Restless Legs Syndrome on outpatients who consult the spine surgeon ·······600

M. Ito, et al., Dept.of Orthop.Surg.,St Luke's international hospital

#### Poster 39

Lumbar spinal anatom	ny/Pathology
2-P39-1 Anatomical Analysis For Transforaminal	Approach of Percutaneous Endoscopic Lumba
Discectomy	60
F. Tezuka, et al., Department of Orthopedic	Surgery, Tokushima University
2-P39-2 Morphological analysis of spinous process in le	umbar spine ······60
M. Yazu, et al., Dept. of Orthop. Surg., Kame	oka Shimizu Hospital ; Kameoka-shi, Kyoto, Japan
2-P39-3 Reliability of CT classification for lumbar	spondylolysis in growth periodComparison between
sagittal image CT and axial image CT	602
M. Kamiya, et al., Dept. of Orthop.Surg.Spine	e center, Aichi Medical Univ. School of Medicine
2-P39-4 Terminal-stage spondylolysis untreated until	adulthood ······602
T. Sakai, et al., Dept. of Orthop. Surg., Tokus	shima Univ.
2-P39-5 The relation between the segment of the thor	acolumber lesion and the length of the rib ······603
M. Kitamura, et al., Omigawa general hospit	al, Katori City,Japan

15:30~16:0	Moderator: K. Higashino
	Pathology of lumbar spinal disease
2-P40-1	Application of curved MPR to estimate redundant nerve roots of the patient with LSCS603
	S. Nozawa, et al., Dept. of Orthop. Surg., Mino Municipal Hospital
2-P40-2	Decision making of decompression level in cases of multilevel lumbar spinal stenosis presenting
	cauda equina syndrome ······604
	M. Yoshimoto, et al., Dept. of Orthop. Surg., Sapporo Medical Univ. School of Medicine
2-P40-3	Reversible change of lumbar ligamentum flavum······604
	S. Ohtori, et al., Dept. of Orthop. Surg., Chiba Univ. School of Medicine
2-P40-4	Fibroproliferative disorder as a pathogenesis of the ligamentum flavum hypertrophy in patients
	with the degenerative lumbar spinal canal stenosis ·······605
	Y. Goda, et al., Dept. of Orthop., Tokushima Univ., Tokushima, Japan
2-P40-5	Postoperative facet cyst after posterior decompression for lumbar spinal canal stenosis
	Y. Harada, et al., Dept. of Orthop. Surg., Hakodate Municipal Hospital
2-P40-6	Elevated Phosphorylated Neurofilament Heavy Subunit in CSF in Patients with Lumbar Spinal
	Stenosis 606
	K. Hayakawa, et al., Dept.of Orthop. Surg., the Univ. of Tokyo, Tokyo, Japan

16:00~16:30	Moderator: K. Nakanishi
	Metastatic spinal tumor
2-P41-1	A study on the cases of long–term survival in spinal metastasis $\cdots \cdots \cdots$
	K. Yamashita, et al., Nagasaki Rosai Hospital
2-P41-2	Clinical outcome of palliative surgery for spinal metastasis $\cdots \cdots 607$
	K. Yamashita, et al., Nagasaki Rosai Hospital
2-P41-3	Surgical outcomes of palliative surgery for spinal metastases
	Highlight on the improvement of paresis and ADL- 607
	T. Usui, et al., Dept. of Orthop. Surg., Osaka City General Hospital
2-P41-4	Prognostic evaluation of the patients with metastatic spine tumors ·······608
	S. Yamaoka, et al., Spine Center Ehime University Hospital
2-P41-5	Prognosis for spinal surgery patients with spinal metastasis
	K. Akeda, et al., Dept. of Orthop. Surg., Mie Univ. Gruduate School of Medicine
2-P41-6	Prognostic factors predicting overall survival and progression-free survival after total en bloc
	spondylectomy for spinal metastases ···········609
	H. Hayashi, et al., Dept. of Orthop. Surg, Kanazawa Univ. Graduate School of Medical Sciences,
	Kanazawa, Japan

15:30~16:	00 Moderator: T. Takebayashi
	Spinal tumor
2-P42-1	Surgical technique for lumbar spinal extraforaminal schwannoma
	S. Ishihara, et al., Dept. Of Spine and Spinal Cord Center, International University of Health and
	Welfare Mita Hospital, Tokyo, Japan
2-P42-2	Hemilaminectomy for removal of intradural extramedullary spinal cord tumors
	K. Naito, et al., Department of Neurosurgery, Osaka City University Graduate School of Medicine,
	Osaka, Japan
2-P42-3	Clinical characteristic and surgical outcome of spinal cord tumor arising around conus medullaris 610
	K. Naito, et al., Department of Neurosurgery, Osaka City University Graduate School of Medicine,
	Osaka, Japan
2-P42-4	Surgical Result for Spinal Meningioma: Surgical resection without dural reconstruction611
	A. Takazawa, et al., Department of Orthopaedic Surgery, Graduate School of Biomedical Sciences,
	Hiroshima University
2-P42-5	A preliminary algorithm to differentiate between spinal meningioma and schwannoma by using
	unenhanced MR imaging 611
	E. Iwata, et al., Dept. of Orthop. Surg., Nara Medical University

2-P44-2

2-P42-6	Clinical features and postoperative outcomes of patients with multiple tumors of spinal cord and
	cauda equina ······612
	Y. lizuka, et al., Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine
	Poster 43
16:00~	16:30 Moderator: M. Takahata
	High risk spinal surgery
2-P43-1	Does the degree of abdominal aortic calcification descending the ventral side of lumbar vertebra
	have a possibility of predictive factor for perioperative ischemic cardiac event? -Risk management
	of perioperative complication using quantitative assessment of calcification with multi-detector
	computed tomography612
	M. Nakahara, et al., Dept. of Spine Surgery, Fukuoka Wajiro Hospital
2-P43-2	Complication's care after surgery of cervical cord injury due to other's injury and cord injury level
	613
	F. Miyaguchi, et al., Imakiire genersal hospital
2-P43-3	Operative treatments of cervical myelopathy caused by lysosome disease ······613
	H. Terai, et al., Dept. of Orthopaedic Surgery, Osaka City University Graduate School of Medicine
2-P43-4	Clinical outcomes of spine fusion surgery for lumbar spinal instability in patients with autoimmune
	disorders on long-term glucocorticoid therapy 614
	M. Takahata, et al., Dept. of Orthop. Surg., Hokkaido Univ. School of Medicine
2-P43-5	Prevalence and mechanism of adjacent segment disease following lumbar spine fusion for dialysis
	associated spondylosis in long-term hemodialysis patients ·······614
	K. Maruo, et al., Department of Orthopaedic Surgery, Hyogo College of Medicine
2-P43-6	Analysis of perioperative complications in spinal surgery via anterior approach for the thoracic and
	lumbar spine 615
	K. Miyamoto, et al., Department of Regional Medicine and Musculoskeletal Science, Gifu University
	Graduate School of Medicine, Gifu, Japan
	Poster 44
15:30~	16:00 Moderator: I. Yonezawa
	Coservative treatment/Diagnostic method 1
2-P44-1	The clinical outcomes of osteoporotic vertebral body fractures treated conservatively with
	admission in a hospital



T. Kaneko, et al., Dept. of Orthop. Surg., Hachinohe Municipal Hospital, Aomori, Japan

H. Takei, et al., Yamagata Spine Centr., Miyukikai Hospital

2-P44-3	Effect of Boston brace in Adolescent Idiopathic Scoliosis: analysis according to curve type, curve
	magnitude and skeletal maturity 616
	T. Morino, et al., Spine Center, Ehime Univ. Hosp.
2-P44-4	A prognostic factor after the brace treatment of Lenke type 1 adolescent idiopathic scoliosis · · · · · 617
	K. Yamane, et al., Dept. of Orthop. Surg., Okayama Univ. School of Medicine
2-P44-5	The utility of the evaluation using JOABPEQ for Adolescent Idiopathic Scoliosis
	M. Shimizu, et al., Dept. of Orthop. Surg., Shinshu Univ. School of Medicine
2-P44-6	Evaluation of Risser sign with ultrasound for the patients with scoliosis
	M. Hongo, et al., Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine
	Poster 45
10:00	16 · 20
16:00~	W. Teelimiete
	Coservative treatment/Diagnostic method 2
2-P45-1	$Indication \ and \ effectiveness \ of \ spinal \ cord \ stimulation \ for \ intractable \ pain \cdots 618$
	M. Hirasawa, et al., Dept. of Neurosurgery, Tokyo Women's Medical University, Medical Center

K. Segami, et al., Dept.of Orthop.Surg., HFujigaoka Hp Showa Univ.school of Medicine

East

Ebara Hospital

2-P45-2

2-P45-3

2-P45-4

2-P45-5

2-P45-6

# Poster 46

N. Mamizuka, et al., Dept. of Orthop. Surg. Unic. of Tsukuba Mito Medical Center

M. Yoshimoto, et al., Dept. of Orthop. Surg., Sapporo Medical Univ. School of Medicine

15:30~15:55	Moderator : A. Tagami
	Pain
2-P46-1	Association between spine-related pain and body composition ·······621
Y	Y. lizuka, et al., Dept. of Orthop. Surg., Gunma Univ. Graduate School of Medicine
2-P46-2	Relation to fat degeneration of paravertebral muscle in chronic low back pain ······ 622
H	H. Takashima, et al., Div. of Radiology and Nuclear Medicine, Sapporo, Japan

2-P46-3	Development of neuropathic pain screening tool due to spinal disorders: Multicenter cross sectional
	study ····· 622
	T. Nikaido, et al., Dept. of Orthop. Surg., Fukushima Medical Univ. School of Medicine
2-P46-4	High-dose acetaminophen has neither anti-inflammatory nor analgetic advantage over loxoprofen
	sodium hydrate for the pain after spine surgery
	Y. Nagamoto, et al., Dept. of Orthop. Surg., Osaka National Hospital
2-P46-5	Prediction of pain after surgery in patients with degenerative spinal diseases: preoperative
	evaluation using PainDETECT and BS-POP questionnaire 623
	D. Kudo, et al., Department of Orthopedic Surgery, Akita University Graduate School of Medicine

 $16:00\sim16:30$ Moderator : K. Sato Ossification of spinal ligament 1 2-P47-1 C. Kawahara, et al., Dept. of Orthop. Surg., Sendai-Nishitaga National Hospital 2-P47-2 Prognostic factors affecting surgical results of posterior indirectdecompression with fusion for T. Fujita, et al., Enshu hospital, Hamamatsu, Japan 2-P47-3 Ponte osteotomy during dekyphosis for indirect posterior decompression with ossification of K. Ando, et al., Dept. of Orthop. Surg., Nagoya Univ. School of Medicine 2-P47-4 A criteria of the triangle step test for thoracic myelopathy associated with ossification of the ligamentum flavum 625 T. Morii, et al., Yokohama Minamikyousai Hospital 2-P47-5 Ossification of the posterior longitudinal ligament assessed by micro computed tomography: a K. Fukutake, et al., Dept. of Orthop. Surg., Toho Univ. 2-P47-6 The characteristic of spino-pelvic sagittal alignment in patients with cervical OPLL associated with H. Nishimura, et al., Dept. of Orthop. Surg., Tokyo medical Univ. School of Medicine