

SPECIAL POSTER SESSION # 1

THURSDAY JUNE 16, 2011 7.45 -8.45

A. LOW BACK PAIN I

Moderators: William Marras and Osamu Shirado

Room: R22

- SP1. The relationship between degenerative lumbar scoliosis and low back pain in patients with lumbar spinal stenosis - A cohort study
Watanabe, K, Otani, K, Onda, A, Nikaido, T, Yabuki, S, Kikuchi, S, Konno, S:
Fukushima city, Japan
- SP2. Validation of the Estimation of Physiologic Ability and Surgical Stress (E-PASS) in thoracolumbar instrumented spine surgery for elderly patients
Togawa, D, Kanayama, M, Shigenobu, K, Oha F, Yamada, K, Hashimoto, T:
Hokkaido, Japan
- SP3. Enhanced activation of the posterior cingulate cortex by lumbar mechanical stimulus in chronic low back pain patients: an fMRI study
Yoshida, K, Kurata, J, Matsuo, Y, Yamazaki, H, Kouta, T, Sekiguchi, M, Konno, S:
Fukushima City, Japan, Kyoto city, Japan
- SP4. Evaluation of the quality of life of patients with lumbar spinal stenosis using the Japanese orthopaedic association back pain evaluation questionnaire
Hideki, I, Keisuke, T, Tetuya, T, Fuminori, S, Kohei, K, Yoshitomo, O:
Saitama, Japan
- SP5. Characteristics of lumbar extensor muscle size and strength in women with lumbar degenerative diseases scheduled for fusion surgery
Lee CS, Chung SS, **Kang KC**; Park SJ: Seoul, Republic of Korea
- SP6. Intradiscal injection of COX-2, but not COX-1 inhibitor reduces CGRP expression in dorsal root ganglion neurons innervating injured intravertebral disks in rats
Fujimaki, H, Miyagi, M, Ishikawa, T, Kamoda, H, Eguchi, Y, Arai, G, Suzuki, M, Kubota, G, Sakuma, Y, Oikawa, Y, Inoue, G, Ohtori, S, Takahashi, K:
Chiba, Japan

B. COMPLICATIONS

Moderators: Peter Fritzell and Everard Munting

Room: R23

- SP7. Factors affecting the occurrence of postoperative pulmonary embolism following spinal surgery data from the japanese diagnosis procedure combination database
Masuda, K, Hara, N, Chikuda, H, Takeshita, K, Yasunaga, H, Horiguchi, H, Matsuda, S, Nakamura, K: Tokyo, Japan and Fukuoka, Japan
- SP8. Efficacy of nanostructured titania in the management of infection due to spinal implants
Aboelzahab, A, Azad, A-M. Goel, V, Biyani, A, Ebraheim, N, **Serhan, H:** Toledo, United States and Waltham, United States
- SP9. Anterior re-operation at the same level following lumbar total disc replacement
Blumenthal, S, Guyer, R, Zigler, J; Ohnmeiss, D: Plano, Texas, United States
- SP10. Evaluation of the lumbar intervertebral disc degeneration in collegiate athletes using magnetic resonance diffusion-weighted imaging
Otsuka, S, Yanagisawa, O, Hangai, M, Sekine, C, Eguchi, Y, Kaneoka, K: Saitama, Japan, Tokyo, Japan, Chiba, Japan
- SP11. Evaluation of dynamic mobility in osteoporotic vertebral fracture non-union for the appropriate diagnosis and prediction of vertebral deformity correction with vertebroplasty
Takemasa, R, Kiyasu, K, Tani, T, Kawasaki, M, Tadokoro, N, Kasai, Y: Kochi, Japan
- SP12. A comparative study between Anterior Lumbar Interbody Fusion with and without Pedicle Screw Fixation for Isthmic Spondylolisthesis. A long term follow up study
Mossaad, MM,, Ahmed, M: Zagazig-Sharkia, Egypt

C. NERVE / CELL BIOLOGY I/MISCELLANEOUS

Moderators: Kee-Yong Ha and Koichi Masuda

Room: R24

- SP13. p38<alpha> and p38<beta> MAPK repress inflammatory stress-induced expression of MMP-1 and MMP-3, respectively, in human nucleus pulposus cells
Vo, N, Sowa, G, Christian, E, Witt, W, Ngo, K, Lee, J, Kang, J, Studer, R: Pittsburgh, United States
- SP14. Role of PGE2 on the regulation of lumbar intervertebral disk degeneration
Sawaji, Y, Endo, K, Kimura, D Tanaka, H, Kosaka, T: Tokyo, Japan
- SP15. High osmolality reduces the proliferation rate of nucleus pulposus intervertebral disc cells, negatively regulates their response to exogenous growth factors and activates an enhanced DNA repair mechanism
Mavrogonatou, E, **Kletsas, D**: Athens, Greece
- SP16. Diffusion weighted magnetic resonance imaging of symptomatic nerve root of patients with lumbar disc herniation
Eguchi, Y, Ohtori, S, Orita, S, Inoue, G, Hiroto, K, Arai, G, Ishikawa, T, Miyagi, M, Masuda, Y, Takahashi, Ka: Chiba, Japan
- SP17. Oxygen environment and mechanical stress can promote expression of VEGF by disc cells
Neidlinger-Wilke, C, Mietsch, A, Urban, J, **Galbusera, F**, Liedert, A, Wilke, H-J, Ignatius, A: Ulm, Germany and Oxford, United Kingdom
- SP18. The polyphenol resveratrol shows promising potential for the treatment of nucleus pulposus mediated pain in vitro and vivo
Wuertz, K, Quero, L, Sekiguchi, M, Klawitter, M, Nerlich, A, Konno, S, Kikuchi, S, Boos, N: Zurich, Switzerland; Fukushima, Japan, Munich, Germany

D. SURGERY

Moderators: Mark Brown and David Wong

Room: R25

- SP19. Outcome of lumbar surgery in patients with hemodialysis-related spondyloarthropathy
Ogihara, S, Kunogi, J, Masuyama, S, Sasagawa, T, Takeuchi, Y, Fukushima, M, Kashiwama, T: Tokyo, Japan
- SP20. Sagittal rebalance after pedicle subtraction osteotomy at the lumbar spine
Rousseau, M-A, Lazennec, J-Y, French Scoliosis Study Group: Paris, France
- SP21. Risk factor for adjacent segment degeneration after surgical correction of degenerative lumbar scoliosis
Ha, K-Y, **Oh, I-S**: Seoul, Republic of Korea and Incheon, Republic of Korea
- SP22. Comparison of clinical and radiological outcomes of three surgical techniques in Scheuermann's kyphosis
Mehedian, H, Arun, R, Copas D, **Mehta, J**: Nottingham, UK
- SP23. Night-time Providence bracing compared to full time Boston bracing in adolescent idiopathic scoliosis. A prospective randomized study
Wessberg, P, Hedlund, R, Nordwall, A:, Gothenburg, Sweden
- SP24. Rapid and sensitive detection of bacteria by real-time PCR in pyogenic spondylitis cases
Nakamura, Y, Aota, Y, Inaba, Y, Nakamura, N, Kobayashi, N, Kawai, T, Tanabe, H, Choe, H, Wakayama, Y, Yamaguchi, Y, Saito, T, Yokohama-city, Japan

E. THE AGING SPINE: SPINAL STENOSIS / OSTEOPOROSIS

Moderators: Ashish Diwan and Chang-Hoon Jeon

Room: R26

- SP25. Analysis of prognostic factors affecting ambulatory status for patients with metastatic spinal tumor -Use of the Revised Tokuehashi Score
Takuya, K, Aota, Y, Nakamura, N, Tanabe, H, Nakamura, Y, Yamaguchi, Y, Saito, T: Yokohama, Japan
- SP26. Spondylolisthesis following osteoporotic fracture in middle-lower lumbar vertebra: clinical features and surgical treatment
Yamashita, T, Sakaura, H, Miwa, T, Ohwada, T: Hyogo, Japan
- SP27. Clinical outcomes of lumbar spinal surgery in elderly patients more than 75 years old
Matsumoto, T, Terai, H, Toyoda, H, Suzuki, A, Dohzono, S, Yamada, K, Yasuda, H, Takahashi, S, Tsukiyama, K: Osaka, Japan
- SP28. Patient concerns about undergoing elective musculoskeletal surgery
Rampersaud, YR, Gandhi, R, Hudak, P, Veillette, C, Syed K, Lewis, S, Ogilvie-Harris, D, Davey, R, Mahomed, N: Toronto, Canada
- SP29. Spinal stenosis in the spine patient outcomes research trial (Sport): Does psychological distress affect treatment outcome?
Davis, G Spratt, KF, **Abdu, WA**, Zhao, W, Albert, A, Weinstein, JN: Lebanon, United States
- SP30. Biomechanical, histological and histomorphometric analyses of calcium phosphate cement compared to PMMA for vertebral augmentation in a validated animal model
Perez-Higueras, A, Altonaga, JR, Orden MG, Mariñoso Barba, ML, Carrascal Morillo, MT, **Alvarez L**: Madrid, Spain; Leon, Spain, Barcelona, Spain

SPECIAL POSTER SESSION #2

SATURDAY JUNE 18, 2011 7.45 - 8.45

F. SURGERY OUTCOMES

Moderators: Sigurd Berven and Tomoaki Toyone

Room: R22

- SP31. Survival analysis of metastatic spine disease: Surgery Vs. conservative treatment
Moon, SH, Lee, HM, **Lee, BH**, Kim, SH, Kim, SH, Lee, SJ: Seoul, Republic of Korea
- SP32. Long term 2 to 4 year clinical and functional outcomes of minimally invasive surgery (MIS) for adult spinal deformity
Anand, N, Daroudi, S, Kahwaty, S, Baron, E: Los Angeles, United States
- SP33. Assessment of the incremental cost-utility of surgery compared to failed medical management for the treatment of hip, knee and spine osteoarthritis
Rampersaud, YR, Tso, P, Walker, K, Eagen, B, Lewis, S, Gandhi, R,; Davey, R, Mahomed, N, Coyte, P: Toronto, Canada (Moved from 22)
- SP34. Comparison of two different approaches to the spinal canal for lumbar decompression: The significance of spinous process preservation
Morita, M, Nakamura, H: Osaka city, Japan
- SP35. Outcomes after revision surgery to treat proximal junctional kyphosis
Okada, E, Berven, S, Takemoto, S, Abdul-Jabbar, A, Zhang, C, Tay, B, Deviren, V, Burch, S, Hu, S: San Francisco, US
- SP36. Clinical course of sciatica is not correlated to the percentage reduction in disc herniation
el Barzouhiel, A, **Vleggeert-Lankamp, C**, Jacobs, W, Peul, W: Leiden, Netherlands

G. LOW BACK PAIN II

Moderators: Louis Jenis and Tom Oxland

Room: R23

SP37. Parameters affecting spinal loads during sitting

Rohlmann, A, Dreischarf, M, Zander, T, Graichen, F, Bergmann, G: Berlin, Germany

SP38. Incidence of lumbar spondylolisthesis in patients with severe knee or hip arthritis

Hashimoto, K, Soshi, S, Marumo, K, Tanaka, T, **Kida, Y**: Tokyo, Japan and Utsunomia, Japan

SP39. Age-related changes in the muscle thickness of the deep and superficial Abdominal muscle

Ota, M, Ikezoe, T, Kaneoka, K, Izumi, S, Fujita, C, Hasegawa, Y, Numazawa, T, Mayumi S, Sakuma, K, Ichihashi, N: Saitama, Japan, Kyoto, Japan, Tokyo, Hyogo, Japan

SP40. Findings of a pilot, randomized controlled trial for non-specific low back pain in the US military

Campello, M, Weiser, S, Ziemke, G, Hiebert, R, Fox, B, Nordin, M: New York City, US and Norfolk, VA, US

SP41. Dominant-negative TNF effectively antagonizes IL-1 β -induced catabolic changes in human intervertebral disc cells

Pichika, R, Penta, K, Yoshikawa, T, Hemmad, A, Szymkowski, D, Benette, F, **Masuda, K**, La Jolla, United States; Sunnyvale, United States Monrovia, United States; Sunnyvale, United States

SP42. Local anesthetics are cytotoxic to intervertebral disc cells in cultured rabbit explants

Lenart, BA, Al-Shihabi, L, Chee, A, Park, C, Zhang, Y, An, HS: Chicago, IL, United States

H. FUSION/ STENOSIS

Moderators: Robert Gunzburg and Jin-Hwan Kim

Room: R24

- SP43. Can we consider adjacent segment disease as being caused by fusion?: observations in 319 cases of follow-up MRI
Jeon, CH, Chung, NS, **Park, DY**, Kim, TH: Kyounggido, Republic of Korea
- SP44. A biomechanic comparison of bicortical sacral screw versus a unicortical and ala screw fixation system
Paxinos, O, Zindrick, M, Voronov, L, Havey, R, Lorentz, M, Tsitsopoulos, P, Ghanayem, A, Patwardhan, A: Athens, Greece, Hinsdale IL, United States; Hines, IL, United States; Maywood, IL, United States
- SP45. Can MRI replace myelography or CT myelography in lumbar spinal stenosis?
Sasaki, K, Hasegawa, K, Shimoda, H, Homma, T: Niigata City, Japan
- SP46. Toxicity of Methylene Blue in the epidural space
O'Neill, C, Thullier, D, Buser, Z, Liebenberg, E: El Naga, A, Coughlin, D, Lotz, J: San Francisco, United States
- SP47. Anterior alone lumbar interbody fusion with rhBMP-2: a prospective study of clinical and radiographic outcomes
Ewing, L, Lisle, D, Pearcy, M, **Licina, P**: Brisbane, Australia
- SP48. outcome and radiographic assessment of lateral lumbar interbody fusion performed as a stand-alone procedure
Pumberger, M, Kotwal, S, Gogia, J, Lebl, D, Caridi, J, Abjornson, C, Hughes, A, Sama, A, Cammisa, F, Girardi, F: New York, US,

I. DEGENERATIVE DISC BIOLOGY

Moderators: Jeffrey Lotz and Ho-Joong Kim

Room: R25

- SP49. Role of biomolecules on cross-ply mechanics of the annulus fibrosus
Isaacs, J, Vresilovic, E, Marcolongo, M: Philadelphia, United States
- SP50. A novel in vitro explant model for studies of cellular migration in intervertebral discs
Barreto Henriksson, H, Svala, S, Skioldebrand, E, Junevik, K, Lindahl, A, Brisby, H: Gothenburg, Sweden and Uppsala, Sweden
- SP51. Proliferative response of human intervertebral disc cells to exogenous and autocrine growth factors: Involvement of pivotal signaling pathways
Pratsinis, H, Constantinou, V, Pavlakis, K, Sapkas, G, **Kletsas, D**: Athens, Greece
- SP52. Effects of cyclic strain on the activation of signaling pathways and the proliferative behaviour of intervertebral disc cells in vitro
Pratsinis, H, Iconomopoulos, S, Neidlinger-Wilke, C, **Kletsas, D**: Athens, Greece, Ulm, Germany
- SP53. Is the morphology and size of schmorl's nodes of the lumbar spine related to severity of disc degeneration?
Mok, F, **Samartzis, D**, Karppinen, J, Fong, D, Luk, K, Cheung, K: Hong Kong,
- SP54. Genotoxic stress accelerates intervertebral disc matrix loss
Vo, N, Aurelio Nasto, L, Wang, D, Robinson, A, Clauson, C, Dong, Q, Choe, SR, Sowa, G, Lee, J, Roughley, P, Niedernhofer, L, Kang, J: Pittsburgh, United States; Beijing, China, Montreal, Canada

J. OUTCOME MEASUREMENTS / MEDICAL ECONOMICS

Moderators: Jeremy Fairbank and Kotaru Nishida

Room: R26

- SP55. Normal values of the Japanese version of the Zurich Claudication Questionnaire (ZCQ)
Hara, N, Masuda, K, Morii, J, Tohnosu, J, Takeshita, K, Nakamura, K, Matsudaira, K: Tokyo, Japan, Kawasaki, Japan
- SP56. A comparison of goal achievement and traditional self-report measures as contributors to overall patient satisfaction 1 year following functional restoration for patients with chronic disabling spinal disorders
Hazard R, Spratt, K, McDonough, C, Olson, C, Ossen, E, Hartmann, EM: Lebanon, United States
- SP57. Development and validation of a quality of life scale specific for lumbar spinal stenosis
Sekiguchi, M, Wakita, T, Otani, K, Onishi, Y, Fukuhara, S, Kikuchi, S, Konno, S: Fukushima, Japan; Kyoto, Japan
- SP58. Simplify outcome measurement
Hägg, O, **Brisby, H**, Jönsson, B, Strömqvist, B, Fritzell, P: Gothenburg, Sweden; Lund, Sweden and Falun, Sweden
- SP59. Production losses due to low back pain while at work and out of it
Wieser, S, **Mannion, A**, Eisenring, C, Elfering, A, Brügger, U, Müller, U, Horisberger, B: Zurich, Switzerland; Winterthur, Switzerland; Berne, Switzerland;
- SP60. A new outcome measure for Japanese individuals with Adolescent Idiopathic Scoliosis; An introduction and validation study
Shirado, O, Doi, T, Arai, Y; Takeshita, K, Iwabuchi, M, Akai, M, Iwaya, T, Shida, T: Aizu-wakamatsu, Japan; Tokyo, Japan; Tokorozawa, Japan