## **Poster Presentation**

Meeting Room (501), 5F, Conference Center, PACIFICO Yokohama

#### Poster Presentation 1 SCI P-001 Is Early Surgery Effective in Improving Paralysis in Cervical Spinal Cord Injury? Shinji Tanishima, Tokumitsu Mihara, Chikako Takeda, Masaki Yoshida, Masashi Fujiwara, Hideki Nagashima (Japan) Surgical strategy and clinical efficacy of Acute traumatic central cord syndrome with cervical spinal stenosis P-002 (China) Xinghuo Wu, Cao Yang P-003 Clinical Experience of Early Surgical Treatment of Cervical Hyperextension Injury during COVID-19 [E-poster] Pandemic (China) Wei Xiang, Fenghua Tao Preparation of dynamically cross-linked polyurethane hydrogel and establishment of a novel chronic P-004 cervical spinal cord compression rat model (China) Rui Chen P-005 Transcriptomics-based study of the crucial serum markers of cervical and thoracic spinal cord injury [E-poster] (China) Fei Yin, Ding Zhang, Ran Li, Kunchi Zhao, Li Guo, Qingsan Zhu P-006 Characteristics of plasma lipid metabolism and potential biomarkers in patients with acute spinal cord injury [E-poster] (China) Tengfei Zhao, Yifan Wang, Kan Xu, Xiankuan Xie, Fangcai Li, Qixin Chen P-007 Silicate Nanoplatelets Promotes Neuronal Differentiation of Neural Stem Cells and Restoration of Spinal

[E-poster] Cord Injury

(China) <u>Yifan Wang</u>, Tengfei Zhao, Yiren Jiao, Hanxu Huang, Yongxiang Zhang, Yanling Zhou, Qionghua Wu, Jiang Chang, Fangcai Li, Kan Xu

## Poster Presentation 2 Alignment

- P-008 C2 slope, How reliable is it? Reproducibility of cervical sagittal alignment parameters including C2 slope measurements in cervical spondylotic myelo-radiculopathy patients
   (South Korea) Dongchan Eun, Kyungsoo Suk, Haksun Kim, Jiwon Kwon, Seongwhan Moon, Byungho Lee
- P-009 Segmental modified K-line interval on T2-weighted MRI can predict JOA recovery rate after posterior decompression surgery in patients with cervical spondylotic myelopathy
   (Japan) <u>Naoki Yamaguchi</u>, Kazuya Kitamura, Akimasa Yasuda, Atsuto Umei, Yohei Kurita, Takahiro Ishizaka, Takahiro Nakagawa, Kazuhiro Chiba
- P-010 Cervical sagittal parameters and cervical posterior spondylolisthesis (Japan) <u>Koji Matsumoto</u>, Hirokatsu Sawada, Sosuke Saito, Satoshi Suzuki, Kazuyoshi Nakanishi
- P-011 Does T1 slope minus cervical lordosis mismatch affect surgical outcomes of cervical laminoplasty in the absence of preoperative severe kyphosis?

(Japan) <u>Ryuji Sakamoto</u>, Hideki Nakamoto, Nozomu Ohtomo, Kosei Nagata, So Kato, Toru Doi, Yoshitaka Matsubayashi, Yuki Taniguchi, Sakae Tanaka, Yasushi Oshima

- P-012 Does Preoperative T1 Slope Affect the Revision Rate of Multilevel Posterior Cervical or Cervical-Thoracic Fusions: Multi-Center Analysis
   (USA) Devender Singh, Eeric Truumees, <u>Ashley Duncan</u>, Matthew Geck, John Stokes
- P-013 A novel cervical sagittal classification for an asymptomatic population based on cluster analysis (China) Hongli Wang, Haocheng Xu, Zhaoyang Gong, Xiaosheng Ma, Feizhou Lyu, Jianyuan Jiang

P-014 Investigation of the compensatory mechanism of the upper thoracic spine in sagittal alignment and consideration of the relationship with the cervical spine
 (Japan) Masatsune Sato, Masaaki Uesugi, Takuya Kawai, Yosuke Kobayashi, Yoichi Aota

## **Poster Presentation 3 Infection**

#### P-015 Canceled

P-016 A Case of Charcot Spine Developing in a Young Woman With Acquired Analgesia After Acute Disseminated Encephalomyelitis

- P-017 Application of percutaneous CT-guided cervical biopsy combined with metagenomic next generation sequencing in the pathogenic diagnosis of pyogenic cervical vertebral osteomyelitis (China) Jiang Meng, He Xijing
- P-018 From Common to Rare-The Incidence, Changes, and Treatment of Cervical Deformity after Infection and Inflammation
   (China) Bo Han, Yong Hai, Weishi Liang
- P-019 Treatment of pyogenic cervical spondylitis resulting in quadriplegia, surgery or drugs? (China) <u>Siyi Cai</u>, Jingyuan Chao, Ye Tian
- P-020 One stage anterior debridement combined with posterior pedicle screw fixation to treat cervical vertebral space infection (China) Ye Li
- P-021 Efficacy of therapeutic antibiotic therapy for SSI after cervical spinal surgery (Japan) <u>Shingo Aoyama</u>, Hiroshi Miyamoto, Terumasa Ikeda, Kensuke Toriumi, Masao Akagi

## Poster Presentation 4 Atlanto-Axial

P-022 Comparison of fusion versus non-fusion surgery for non-inflammatory retro-odontoid pseudotumor with atlanto-axial subluxation

(Japan) <u>Masashi Uehara</u>, Shota Ikegami, Shugo Kuraishi, Hiroki Oba, Takashi Takizawa, Ryo Munakata, Terue Hatakenaka, Takayuki Kamanaka, Yoshinari Miyaoka, Jun Takahashi

- P-023 Is Anterior Retropharyngeal Release Combined with Posterior Instrumented Fusion Feasible For Irreducible Atlantoaxial Dislocation : A Retrospective Study of 37 Patients (China) <u>Feng Li</u>, Jianfeng Guo, Zhong Fang, Wei Xiong
- P-024 Preliminary Clinical Efficacy of Goel Technique in the Treatment of Irreducible Atlantoaxial Dislocation with Skull Base Depression
   (China) Tong Tong, Feng Wang, Linfeng Wang
- P-025 C1 laminectomy without fusion for retro-odontoid pseudotumor without atlantoaxial subluxation (Japan) Juntaro Maruyama, Satoshi Maki, Yuki Nagashima, Yuki Shiratani, Masataka Miura, Atsushi Yunde, Takaki Inoue, Takeo Furuya, Seiji Ohtori
- P-026 Imaging anatomical study and clinical application of transoral axis slide and rotation osteotomy technique (China) Xiangyang Wang, Haiming Jin, Aimin Wu, Sunren Sheng
- P-027 Anterior C2-3 Fusion Surgery Alone for Highly Displaced Hangman's Fracture with Severe Angulation of C2-3
   (South Korea) Jong-Beom Park, Young-Yul Kim, Dong-Gune Chang
- P-028 Effect of atlanto-axial fusion on cervical spine saggital parameters and Nurick scale (Nepal) <u>Dipak Shrestha</u>, Sabik Raj Kayastha, Bishnu Hari Chandi, Bikash Parajuli

<sup>(</sup>Japan) <u>Yukimasa Yamato</u>, So Kato, Yoshitaka Matsubayashi, Yuki Taniguchi, Yorito Anamizu, Sakae Tanaka, Yasushi Oshima

## Poster Presentation 5 Circulation Upper C

P-029 A case of Bow Hunter's Syndrome and a systematic literature review [E-poster] (China) Shuai hao Huang, Qifei Duan, Dong Yin, Changxiang Liang

P-030 The origin and distribution of blood vessel of the longus colli muscle: a cadaveric study (China) Shuhao Zhang, Xiangyang Wang

P-031 A juvenile case of bow hunter's syndrome due to a bone fragment from an osteophyte of the atlas [E-poster] (China) Shuai hao Huang, Qifei Duan, Dong Yin, Changxiang Liang

P-032 A Rotational Vertebral Artery Occlusion (Bow Hunter's Syndrome, BHS) caused by C1 Congenital [E-poster] Osteophyte

(China) Changxiang Liang

- P-033 Incidence and management of surgical site infection in the cervical spine following a transoral approach (China) <u>Hu Chen</u>, Qiang Tu, Changrong Zhu, Hong Xia
- P-034 Transoral anterior release for IAAD complicated by concomitant aberrant ICAs (Japan) <u>Kazuhiro Inomata</u>, Eiji Takasawa, Yoichi lizuka, Tokue Mieda, Sho Ishiwata, Yusuke Tomomatsu, Akira Honda, Shunsuke Ito, Kenta Takakura, Hirotaka Chikuda

#### Poster Presentation 6 Complication

P-035 Angiomatous meningioma in the craniocervical junction

(Japan) <u>Akira Honda</u>, Yoichi lizuka, Shunsuke Ito, Tokue Mieda, Eiji Takasawa, Sho Ishiwata, Yusuke Tomomatsu, Kazuhiro Inomata, Hirotaka Chikuda

P-036 Case: Treatment of Infection after Combined Anterior-posterior Reconstruction for Osteosarcoma In Atlas [E-poster] (China) Anlong Jiang, Ye Ji, Jinglong Yan

P-037 Dysphagia caused by DISH disease revealed by CT of the cervical spine

[E-poster] (China) Jingwei Liu, Qiang Wang

- P-038 Osteophyte formation causing neurological symptoms after anterior cervical discectomy and fusion (ACDF): a case report
  - (China) <u>Haiming Jin</u>, Jiangtao Luo, Yuhan Jiang, Jinghao Lin, Junchen Jiang, Rufeng Ren, Yaosen Wu, Xiangyang Wang
- P-039 Measurement of infrahyoid muscles stiffness by shear wave elastgraphy in anterior cervical spine surgery (Japan) Yohei Ito, Yosuke Kobayashi, Yuichiro Kawabe, Hiroki Katayama, Ryo Itagaki, Taichi Kasahara, Yutaka Inaba
- P-040 Postoperative nerve palsy in 1434 cases of anterior cervical spine surgery a multicenter study (Japan) <u>Hiroaki Onuma</u>, Kenichiro Sakai, Kyohei Sakaki, Takashi Hirai, Motonori Hashimoto, Shuta Ushio, Shigeo Shindo, Yoshiyasu Arai, Toshitaka Yoshii, Atsushi Okawa
- P-041 Prospective Study of Dysphagia after Cervical Spine Surgery for Cervical Spondylotic Myelopathy and Posterior Longitudinal Ligament Ossification.
   (Japan) Kyohei Sakaki, Kenichiro Sakai, Yoshiyasu Arai, Hiroaki Onuma, Atsushi Okawa
- P-042 Acute Cervical Epidural Hematoma, Screw Pullout, and Esophageal Perforation After Anterior Cervical Corpectomy Surgery: Report of a Case (China) <u>Ye Li</u>, Qingsan Zhu
- P-043 Variation in Prevertebral Soft Tissue Swelling after Staged Combined Multilevel Anterior-Posterior Complex Cervical Spine Surgery: Anterior then Posterior (AP) versus Posterior then Anterior-Posterior (PAP) Surgery (South Korea) Dongchan Eun, Kyungsoo Suk, Haksun Kim, Jiwon Kwon, Seongwhan Moon, Byungho Lee

# Poster Presentation 7 OPLL A case of occipital headache and neck pain caused by cerebrospinal fluid leak (Japan) Takahiro Miyahara

- P-045 Clinical characteristics of patients who have undergone spinal surgery for cervical or thoracic myelopathy, caused by ossification of the posterior longitudinal ligament (Japan) Shinsuke Yoshida, Soichi Oya, Kazuo Saita, Satoshi Ogihara
- P-046 Vertebral Body Sliding Osteotomy for ossification of posterior longitudinal ligament of the cervical spine (first case in Japan)
   (Japan) Ivan Sekiguchi, Naoki Ishida

P-047 Clinical application of Cervical OPLL surgery algorithm : Safety and effectiveness analysis

[E-poster] (China) Huajiang Chen

P-044

- P-048 Imaging Features and Treatment of ossification of the posterior longitudinal ligament in the upper cervical spine
  - (Japan) <u>Motonori Hashimoto</u>, Toshitaka Yoshii, Kurando Utagawa, Jun Hashimoto, Satoshi Egawa, Yu Matsukura, Kentaro Yamada, Takashi Hirai, Hiroyuki Inose, Atsushi Okawa
- P-049 Assessment of cervical myelopathy risk in OPLL patients with spinal cord compression based on segmental dynamic versus static factors
  - (Japan) <u>Zhongyuan He</u>, Tran Canh Tung Nguyen, Taketoshi Yasuda, Shoji Seki, Kayo Suzuki, Kenta Watanabe, Hiroto Makino, Hayato Futakawa, Katsuhiko Kamei, Yoshiharu Kawaguchi

## Poster Presentation 8 Anterior

P-050 Canceled

P-051 Segmental slope is a predictor of fusion rate in single level anterior cervical discectomy and fusion [E-poster] (China) Xiaqing Sheng, Yang Meng, Hao Liu

P-052 Preoperative Cervical Cobb Angle is a Risk Factor for Postoperative Axial Neck Pain after Anterior [E-poster]Cervical Discectomy and Fusion with Zero-profile Interbody

- (China) <u>Xu Chen</u>, Xiaolong Shen, Yang Liu, Huajiang Chen, Wen Yuan
- P-053 Paraspinal muscle morphology in patients with proximal cervical spondylotic amyotrophy (Japan) Ryosuke Hirota, Mitsunori Yoshimoto, Toshihiko Yamashiya
- P-054 Biomechanical Evaluation of Different Surgical Approaches for the Treatment of Adjacent Segment Diseases After Primary Anterior Cervical Disectomy and Fusion: A Finite Element Analysis (China) <u>Chao Chen</u>, Yong Gao, Cao Yang
- P-055 Using the mixture of local bone dust and morselized bone as graft materials in single- and double-level ACDF (China) <u>Fei Ma</u>, Dejun Zhong, Qing Wang, Shicai Xu
- P-056 A novel anatomic cervical motion-preserving prosthesis for subtotal cervical corpectomy: the design and [E-poster] preliminary biomechanical evaluation
  - (China) Ting Zhang

## Poster Presentation 9 Basic Science

P-057 Extracellular vesicles from mesenchymal stem cells suppress RANKL-induced osteoclast differentiation via miR122-5p

(South Korea) Gun Woo Lee, Wook Tae Park, Ju-Hee Choi, Yong-Ju Lim, Gyeong Na Jung

P-058 Parathyroid hormone enhances gap healing and osseointegration in orthopedic porous coated titanium implants: A correlative micro-computed tomographic, histomorphometric and biomechanical analysis (China) Xinlin Gao, Yang Meng, Dingjun Hao, Hao Liu

P-059 Mechanical stress accelerates nucleus pulposus cells senescence and intervertebral disc degeneration via [E-poster] the positive feedback of NF- $\kappa$ B and Periostin

(China) Taifeng Zhou, Jinna Wu, Yuyu Chen, Zhiheng Liao, Peiqiang Su

P-060 Carbohydrate sulfotransferase 3 alleviates intervertebral disc degeneration by promoting autophagy [E-poster] (China) Huajian Zhong, Chen Xu, Ruizhe Wang

- P-061 Muscone suppresses inflammation and senescence of nucleus pulposus via p53 signalling during [E-poster] intervertebral disc degeneration
  - (China) <u>Ruizhe Wang</u>, Chen Xu, Huajian Zhong, Zifan Zhang, Huiqiao Wu, Ye Tian, Xiaolong Shen, Huajiang Chen, Wen Yuan
- P-062 Single-cell RNA-seq analysis identifies subsets of fibroblasts involved in intervertebral disc degeneration [E-poster] and reveals the mechanism of fibrosis
  - (China) Yong Huang, Juehan Wang, Ruibang Wu, Leizhen Huang, Ce Zhu, Yueming Song, Li Zhang, Limin Liu, Ganjun Feng
  - P-063 Interpreting Cold Shock Gene reveals immune response and m6A 5mC modification in Ossification of the Posterior Longitudinal Ligament
    - (China) <u>Guanghua Chen</u>, Anlong Jiang, Yufu Wang, Jinglong Yan

## Poster Presentation 10 Monitoring Scoring

P-064 Efficacy of a novel and simple test to evaluate the finger dexterity in patients with cervical myelopathy -Finger extension test-

(Japan) <u>Kazuya Kitamura</u>, Haruo Sasaki, Shota Amano, Naoki Yamaguchi, Atsuto Umei, Yohei Kurita, Akimasa Yasuda, Seiji Yamane, Kazuhiro Chiba

P-065 Tissue discrimination by bioelectrical impedance during PLL resection in anterior decompression surgery [E-poster] for treatment of cervical spondylotic myelopathy

(China) <u>Wei Liu</u>, Fuqiang Shao

- P-066 Impact of Diabetes Mellitus on the Post-surgical Central Motor and Somatosensory Conduction Recoveries in Degenerative Cervical Myelopathy: A retrospective cohort study (China) Zhengran Yu, Yongyu Ye, Tao Yu, Xiaoqing Zheng, Chong Chen, Shiqiang Zhan, Yunbing Chang
- P-067 Effectiveness of intraoperative Motor Evoked Potentials of anal sphincter in predicting bladder dysfunction after spine surgery (Japan) Nozomu Ohtomo, So Kato, Yuki Taniguchi, Yoshitaka Matsubayashi, Yasushi Oshima

P-068 A new evaluation method for neck muscle tension: using ultrasound-guided needle electromyography for

- [E-poster] the study of recruitment response changes during the work of cervical deep muscle against gravity (China) Fei Yin, Shuang Yang, Kunchi Zhao, Ran Li, Qingsan Zhu
  - P-069 The comparison between Ossification of posterior longitudinal ligament and cervical spondylotic myelopathy patients in health-related quality of life: a multicenter cross- sectional study
     (Japan) <u>Go Uesugi</u>, Takashi Hirai, Toshitaka Yoshii, Kanji Mori, Narihito Nagoshi, Kazuhiro Takeuchi, Keiichi Katsumi, Satoshi Maki, Hiroaki Nakashima, Masashi Yamazaki, Yoshiharu Kawaguchi
  - P-070 Canceled
  - P-071 The applicability of Japanese Orthopaedic Association Cervical Myelopathy Evaluation Questionnaire (JOACMEQ) in healthy community populations in mainland China (China) Shuyang Li, Feifei Zhou, Yu Sun

### Poster Presentation 11 High level study

P-072 Is it possible to safely insert cervical pedicle screw into high-riding VA? (Japan) Kensuke Toriumi, Hiroshi Miyamoto

- P-073 Clinical and radiographic evaluation of patients underwent one level hemi-facetectomy without instrumentation for spinal dumbbell tumors
   (Japan) Yoshitaka Matsubayashi, So Kato, Yuki Taniguchi, Yasushi Oshima
- P-074 Surgical outcomes of cervical myelopathy in patients with athetoid cerebral palsy (Japan) <u>Toshio Nakamae</u>, Takahiro Harada, Naosuke Kamei, Yoshinori Fujimoto, Hideki Manabe, Nobuhiro Tanaka, Yasushi Fujiwara, Kiyotaka Yamada, Yuji Tsuchikawa, Nobuo Adachi
- P-075 Factors related to implant failure in posterior cervical fusion
  - (Japan) <u>Tokue Mieda</u>, Yoichi Iizuka, Eiji Takasawa, Sho Ishiwata, Akira Honda, Masatoshi Ono, Masatake Ino, Naofumi Toda, Keisuke Fueki, Takachika Shimizu, Hirotaka Chikuda
- P-076 Increased cervical spinal instability is associated with the development of proximal type cervical spondylotic amyotrophy
  - (Japan) <u>Sho Ishiwata</u>, Yoichi Iizuka, Kenta Takakura, Kazuhiro Inomata, Shunsuke Ito, Yusuke Tomomatsu, Akira Honda, Tokue Mieda, Eiji Takasawa, Hirotaka Chikuda
- P-077 Clinical Outcomes of Surgical Management of Mild Cervical Compressive Myelopathy Based on Minimum Clinically Important Difference
  - (Japan) <u>Hiromichi Hirai</u>, Takashi Fujishiro, Yoshiharu Nakaya, Sachio Hayama, Yoshitada Usami, Masahiro Mizutani, Masashi Neo
- P-078 Association between phase angle and the severity of horizontal gaze disorder in patients with idiopathic dropped head syndrome: a cross-sectional study
  - (Japan) <u>Ryunosuke Urata</u>, Tatsuya Igawa, Shomaru Ito, Akifumi Suzuki, Norihiro Isogai, Yutaka Sasao, Haruki Funao, Ken Ishii
- P-079 Association between the horizontal gaze disorder and physical characteristics of patients with dropped head syndrome
  - (Japan) <u>Tatsuya Igawa</u>, Ken Ishii, Ryunosuke Urata, Akifumi Urata, Hideto Ui, Kentaro Ideura, Norihiro Isogai, Yutaka Sasao, Haruki Funao