## JOURNAL OF ORTHOPAEDIC SCIENCE

Official Journal of The Japanese Orthopaedic Association

Г

ŀ

n

'S

m 9;

ed ole ed

Sophie Abrassart, Eiji Itoi

## Volume 21, Issue 4, July 2016 Table of Contents

Review Article	
Clinical and basic research on steroid-induced osteonecrosis of the femoral head in Japan Toshikazu Kubo, Keiichiro Ueshima, Masazumi Saito, Masashi Ishida, Yuji Arai, Hiroyoshi Fujiwara	407 a
Original Articles  Spine  A population approach to analyze the effectiveness of a back extension exercise "One Street	tch" 41 <sup>2</sup>
in patients with low back pain: A replication study  Juichi Tonosu, Ko Matsudaira, Hiroyuki Oka, Hiroshi Okazaki, Takuya Oshio, Izumi Hanaoka,  Yutaka Muraoka, Masahiro Midorikawa, Kikuo Wakabayashi, Sakae Tanaka	11
Clinical diagnosis of upper lumbar disc herniation: Pain and/or numbness distribution are useful for appropriate level diagnosis Tadato Kido, Koichiro Okuyama, Mitsuho Chiba, Hiroshi Sasaki, Nobutoshi Seki, Keiji Kamo, Naohisa Miyakoshi, Yoichi Shimada	more 419
Intrathecal morphine for postoperative pain control after laminoplasty in patients with cerspondylotic myelopathy Tetsuro Hida, Yasutsugu Yukawa, Keigo Ito, Masaaki Machino, Shiro Imagama, Naoki Ishiguro, Fumihiko Kato	rvical 425
Enough positive rate of paraspinal mapping and diffusion tensor imaging with levels whic should be decompressed in lumbar spinal stenosis  Hua-Biao Chen, Zhi-Wei Zhong, Chun-Sheng Li, Bo Bai	h 431
Characteristics of ossification of the spinal ligament; incidence of ossification of the ligamentum flavum in patients with cervical ossification of the posterior longitudinal ligament – Analysis of the whole spine using multidetector CT Yoshiharu Kawaguchi, Masato Nakano, Taketoshi Yasuda, Shoji Seki, Takeshi Hori, Kayo Suzuki, Hiroto Makino, Tomoatsu Kimura	439
Upper Extremity Abduction external rotation position in magnetic resonance arthrography for the diagnosis rotator cuff tears Wenjun Qiu, Xianzhong Tang, Yifan Li, Yunhan Ji, Wei Xu	of 446
Comparison of fixation properties between coil-type and screw-type anchors for rotator curepair: A virtual pullout testing using 3-dimensional finite element method  Hirotaka Sano, Masako Tokungga, Morivuki Noguchi, Takashi Ingwashiro, Taichi Irie, Hiroo Abe	ıff 452

Lower Extremity Increase of patellofemoral height has decreased maximum knee flexion after total knee arthroplasty of posterior cruciate-substituting prosthesis in a clinical series Hiroki Katagiri, Kaori Nakamura, Toshifumi Watanabe, Hideyuki Koga, Kazuyoshi Yagishita, Ichiro Sekiya, Takeshi Muneta	458
Association of mechanical factors with medial knee osteoarthritis: A cross-sectional study from Matsudai Knee Osteoarthritis Survey Go Omori, Kentaro Narumi, Katsutoshi Nishino, Atsushi Nawata, Hiroshi Watanabe, Masaei Tanaka, Kazuo Endoh, Yoshio Koga	463
Total hip arthroplasty with femoral subtrochanteric osteotomy after Schanz osteotomy Motoki Sonohata, Masaru Kitajima, Shunsuke Kawano, Riki Tanaka, Masaaki Mawatari	469
A refined definition improves the measurement reliability of the tip-apex distance Daigo Sakagoshi, Takeshi Sawaguchi, Yosuke Shima, Daisuke Inoue, Takeshi Oshima, Sabine Goldhahn	475
Relationship between dementia degree and gait ability after surgery of proximal femoral fracture Review from Clinical Pathway with Regional Alliance data of rural region in Japan Ichiro Yoshii, Yoshinori Satake, Kenichi Kitaoka, Makoto Komatsu, Kyuichi Hashimoto	481
In vitro implant-bone interface pressure measurements for a cementless femoral implant. A preliminary study Aurélien Courvoisier, Valéry Barbour, Wafa Skalli, David Mitton	487
Treatment of post-traumatic chronic osteomyelitis of lower limbs by bone transport technique using mono-lateral external fixator: Follow-up study of 18 cases Shoutao Zhang, Hua Wang, Jianjun Zhao, Peng Xu, Hui Shi, Weidong Mu	493
Uncemented total hip arthroplasty in patients younger than 20 years Riccardo D'Ambrosi, Luca Marciandi, Piero Vittorio Frediani, Renato Mario Facchini	500
Trauma Patient trends in orthopedic traumas and related disorders after tsunami caused by the Great East Japan Earthquake: An experience in the primary referral medical center Gaku Matsuzawa, Hirotaka Sano, Hideji Ohnuma, Akihito Tomiya, Yoshiyuki Kuwahara, Chihiro Hashimoto, Itaru Imamura, Satoru Ishibashi, Michio Kobayashi, Masakazu Kobayashi, Tadashi Ishii, Iwao Kaneda, Eiji Itoi	507
Locomotive Syndrome and Related Research Relationship between knee osteoarthritis and the locomotive syndrome risk tests: A cross-sectional study Takashi Ohsawa, Shinya Yanagisawa, Hiroyuki Shiozawa, Takuya Omodaka, Kenichi Saito, Takahiro Kitagawa, Hiroki Kobayashi, Tsuyoshi Tajika, Atsushi Yamamoto, Yoichi Iizuka, Haku Iizuka, Kenji Takagishi	512
A novel protocol to test age-related decreases in sit-to-stand movement abilities in healthy subjects Go Yamako, Gang Deng, Koji Totoribe, Etsuo Chosa	517
Basic Research  ROCK inhibition stimulates SOX9/Smad3-dependent COL2A1 expression in inner meniscus cells  Takayuki Furumatsu, Ami Maehara, Toshifumi Ozaki	524

P C C S A A P T A

T ill I

Prediction of pathological fracture of the femoral shaft with an osteolytic lesion using a computed tomography-based nonlinear three-dimensional finite element method Daisuke Chiba, Yu Mori, Hirotaka Sano, Koshi Kishimoto, Masahito Hatori, Atsushi Takahashi, Satoru Nakajo, Eiji Itoi	530
Miscellaneous  Antibiotic-impregnated calcium phosphate cement as part of a comprehensive treatment for patients with established orthopaedic infection  Takahiro Niikura, Sang Yang Lee, Takashi Iwakura, Yoshitada Sakai, Ryosuke Kuroda,  Masahiro Kurosaka	539
The usefulness of neutrophil CD64 expression for diagnosing infection after orthopaedic surgery in dialysis patients Toru Doi, Tokuhide Doi, Naohiro Kawamura, Toshihiro Matsui, Akiko Komiya, Zaika Tei, Gaku Niitsuma, Junichi Kunogi	546
Case Reports	
Posterior approach using a proximal humeral internal locking system long plate for open fractures of the distal tibia: A report of three cases  Naoki Osamura, Kazuo Ikeda, Hidenori Matsubara	552
A cervical myelopathy associated with an anomaly of the axis: Two case reports of invaginated spinous process of the axis with spina bifida into the spinal canal Yutaka Horinouchi, Toshiya Tachibana, Keishi Maruo, Shinichi Inoue, Fumihiro Arizumi, Kazuki Kusuyama, Shinichi Yoshiya	557
The Asian size Exeter femoral stem fracture Kwong-Yin Chung, Kin-Wing Cheung, Kwok-Hing Chiu, Wan-Yiu Shen	562
Reconstruction of right thumb with duplicated left thumb: A case report with 7-year follow-up Jihai Xu, Hong Chen, Xin Wang	566

i3

<u> 59</u>

<sup>1</sup>5