

# Program

Day 1 June 24 (Fri)

**Day1・Room 1 (PACIFICO YOKOHAMA, Conference Center 1F Main Hall)**

**Quick Review Quick review of the Papers in 2021**

(7 : 15~8 : 15)

**Chairs:** H. Inoue  
S. Kitada

1-1-QR-1	Pathological fracture .....	S24
	Dept. of Emergency and Critical Care Center, Kyushu Univ. Hosp.	Kenta Momii
1-1-QR-2	Acute compartment syndrome .....	S24
	Dept. of Orthop. Surg., Jikei Univ. Kashiwa Hosp.	Naoya Inagaki
1-1-QR-3	Open fracture .....	S24
	Gifu Univ. Advanced Critical Care Center	Norihide Kanda
1-1-QR-4	Proximal tibial fracture.....	S24
	Dept. of Critical and Emergency Medicine, Keio Univ. Hosp.	Kazuhiko Udagawa
1-1-QR-5	Clavicle fracture .....	S24
	Dept. of Orthop., Gamagori City Hosp.	Yoichi Sato

**Educational Lecture 1**

(9 : 15~10 : 15)

**Chair:** N. Takahira

1-1-EL1-1	The road of early operative treatment for femoral proximal fracture .....	S6
	Dept. of Orthop. Surg., Saiseikai Yokohmashi Tobi Hosp.	Atsushi Funayama

**Educational Lecture 2**

(10 : 30~11 : 30)

**Chair:** S. Nomoto

1-1-EL2-1	Arthroscopic osteosynthesis for the tibial plateau fractures .....	S7
	Fukuoka Orthop. Hosp.	Masami Tokunaga

**Noontime Lecture 1**

(12 : 00~13 : 00)

**Chair:** M. Matsuura

1-1-NL1-1	A cemented stem is proposed in the 3rd edition of the guidelines for femoral neck fractures in Japan .....	S127
	Dept. of Orthop. Surg., Juntendo Univ., Tokyo, Japan	Tomonori Baba

**Special Lecture****(13 : 30~14 : 30)****Chair: H. Ikegami**

- 1-1-SL-1 Treatment for fracture non-union and infected non-union ..... S3  
Health Insurance Claims Review & Reimbursement Services Takashi Sasaki

**Educational Lecture 3****(15 : 00~16 : 00)****Chair: H. Kawano**

- 1-1-EL3-1 Treatment of Pathological Fractures  
-Orthopaedic Tumor Surgeon and Orthopaedic Trauma Surgeon- ..... S8  
Dept. of Orthop. Surg., Faculty of Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ.  
Toshifumi Ozaki

**Invited Lecture 1****(16 : 20~17 : 20)****Chair: H. Ikegami**

- 1-1-IL1-1 Understanding fractures of the proximal humerus and its treatment options S4  
Prof. Hertel's Shoulder & Elbow Center Ralph Hertel

## Day1 • Room 2 (PACIFICO YOKOHAMA, Conference Center 5F 503)

Panel Discussion 1 Countermeasures for surgery amidst the COVID-19 pandemic (8 : 30～10 : 00)		Chairs: T. Kurozumi T. Maehara	Day 1 Room 1
1-2-PD1-1	Surgical management for fractures in patients with COVID-19 ..... Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Kakogawa, Japan Shunsuke Takahara	S71	Day 1 Room 2
1-2-PD1-2	Did the number of emergency patients and patients with proximal femur fractures decrease under the epidemic of COVID-19? -Comparison before and after the COVID-19 epidemic- ..... Tohoku Rosai Hosp., Sendai, Japan     Hiroaki Ogawa	S72	
1-2-PD1-3	About the treatment of trochanteric fracture of the femur of our hospital in the Coronavirus disease epidemic..... Public Nishichita General Hosp.     Takahiro Suzuki	S73	
1-2-PD1-4	Proximal Femoral Fracture under COVID-19 measures ..... The Orthop., Nagano Matsushiro General Hosp., Nagano, Japan     Jun Kitahara	S74	
1-2-PD1-5	The Change of days waiting for surgery for femoral trochanteric fractures at our hospital, Under COVID-19 ..... The Dept. of Orthop., Miyazaki Prefectural Nobeoka Hosp., Miyazaki, Japan     Kazuaki Ishihara	S75	

**Panel Discussion 2 Treatment strategies for fragility fractures of the pelvis**

(10 : 10~11 : 40)

Chairs: T. Noda  
Y. Ueda

1-2-PD2-1	Treatment of Fragility fractures of pelvis using a posterior locking plate fixation .....	S76
	Kawasaki Hosp.      Masahiro Shirahama	
1-2-PD2-2	The diagonal intersection of the sacral vertebral bodies in the intraoperative fluoroscopic lateral view can be an indicator for easy and safe insertion of the TITS .....	S77
	Orthop. Trauma Center, Shonan Kamakura General Hosp., Kanagawa, Japan      Masahiro Nishida	
1-2-PD2-3	Clinical result of operative treatment for fragility fracture of pelvis .....	S78
	Fukuyama City Hosp. Dept. of Orthop. Surg.      Ryu Tamura	
1-2-PD2-4	Functional treatment strategy for fragility fractures of the pelvis.....	S79
	Amagi Chuo Hosp., Fukuoka, Japan / Karatsu Red Cross Hosp., Saga, Japan      Kensuke Hotta	
1-2-PD2-5	Comparison of conservative and surgical treatment of displaced fragility fractures of the pelvis .....	S80
	Dept. of Orthop. Surg., Tokyo Medical Univ. Ibaraki Medical Center, Ibaraki, Japan      Yusuke Eda	
1-2-PD2-6	Treatment strategy for fragility fractures of the pelvis in the elderly in our hospital .....	S81
	Dept. of Orthop. Surg., Hyogo Prefectural Nishinomiya Hosp., Nishinomiya, Hyogo, Japan Takahiro Oda	

**Noontime Lecture 2**

(12 : 00~13 : 00)

Chair: Y. Watanabe

1-2-NL2-1	Hip fracture Japanese Best Practice Tariff – You can do it if you do it this way – .....	S128
	Kitakyushu General Hosp.      Fumio Fukuda	

**Symposium 1 Treatment policy gleaned from imaging of unstable femoral trochanteric fractures**

(14 : 30~16 : 00)

Chairs: M. Tokunaga  
T. Miyamoto

- 1-2-SY1-1 The morphological characteristics of posterior fragment associated with postoperative sagittal swing motion of short femoral nail in the treatment of pertrochanteric fractures ..... S27  
 Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Hyogo, Japan Ryota Nishida
- 1-2-SY1-2 The influence of posterolateral fractures on postoperative clinical results in femoral trochanteric fracture ..... S28  
 Orthop. and Surg. of the Hand, Nagoya Ekisaikai Hosp., Aichi, Japan Mihoko Kato
- 1-2-SY1-3 Cement augmentation enables early recovery of gait in unstable femoral trochanteric fractures ..... S29  
 Nagoya Medical Center, Aichi, Japan Yusuke Iesaki
- 1-2-SY1-4 Early gait acquisition effect by fixation of posterolateral bone fragments in femoral trochanteric fracture using OLSA ..... S30  
 Dept. of Orthop. Surg., Saiseikai Yokohamashi Tobu Hosp. Toshiyuki Ogata
- 1-2-SY1-5 The ratio of unstable type in pertrochanteric fractures  
 -About 40% are unstable in CT classification, and half of them are expected to be difficult to reduce ..... S31  
 Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Hyogo, Japan Ryota Nishida
- 1-2-SY1-6 Treatment of unstable femoral trochanteric fractures with APOLLOFIX with posterolateral fragment support mechanism ..... S32  
 Dept. of Orthop. Surg., Yokohama-Asahi General Hosp., Yokohama, Japan Mitsutoshi Sagara

**National hip fracture database report and history of FFN Global and FFN Japan**

(16 : 10~17 : 10)

Chair: T. Sawaguchi

- 1-2-FF-1 Background of the establishment of FFN Global and FFN Japan and its activities to date ..... S25  
 Trauma and Reconstruction Center, Shinyurigaoka General Hosp. Takashi Matsushita
- 1-2-FF-2 The Challenge of National Hip Fracture Database in Fragility Fracture Network Japan ..... S26  
 The Dept. of Orthop. Surg., Niigata Rehabilitation Hosp. Noriaki Yamamoto

## Day1 • Room 3 (PACIFICO YOKOHAMA, Conference Center 5F 501)

### Symposium 2 Treatment of cervical spine injuries (upper/mid-to-lower) in the elderly

(8 : 30~10 : 00)

Chairs: M. Doita  
H. Takahashi

- 1-3-SY2-1 Examination of cervical spine injury in the elderly at the advanced critical care and emergency center ..... S33  
Advanced Critical Care and Emergency Center, Yokohama City Univ. Medical Center, Kanagawa, Japan  
Masahiro Matsumoto
- 1-3-SY2-2 Acute posterior decompression and fixation for cervical spinal cord injury in elderly DISH patients ..... S34  
Emergency and Critical Care Medicine, Saitama Medical Center, Saitama Medical Univ., Kawagoe, Japan  
Koichi Inokuchi
- 1-3-SY2-3 Cervical vascular injuries associated with cervical spine and cervical cord trauma ..... S35  
Kansai Medical Univ. Hosp. Emergency Medical Center, Osaka, Japan / Dept. of Emergency and Critical Care Medicine, Kansai Medical Univ. Hosp., Osaka, Japan Atsunori Onoe
- 1-3-SY2-4 A Study of Cervical Spine Injuries in the Elderly at our Hospital ..... S36  
Spine Center, Ohashi Medical Center, Toho Univ., Tokyo, Japan Keisuke Ito
- 1-3-SY2-5 JOACMEC is useful for assessing treatment outcomes in cervical spinal cord injury without major bone injury ..... S37  
Trauma and Reconstruction Center, Teikyo Univ. Hosp., Tokyo, Japan / Dept. of Orthop. Surg., Teikyo Univ. School of Medicine, Tokyo, Japan Tatsuhisa Takekawa

### Symposium 3 Osteoporotic vertebral fractures treatment strategies

(10 : 10~11 : 40)

Chairs: K. Inokuchi  
Y. Tamaki

- 1-3-SY3-1 Influence of bone bridging on fracture morphology and fracture level in spine fractures in the elderly ..... S38  
The Dept. of Orthop. Surg., Murayama Medical Center Mitsuru Furukawa
- 1-3-SY3-2 A retrospective study of the BKP by the double balloon method ..... S39  
JA Toyama Kouseiren Takaoka Hosp., Toyama, Japan Shumpei Okamoto
- 1-3-SY3-3 Multidisciplinary team interventions can provide early pain relief and improve ADL in the treatment of vertebral fractures ..... S40  
Dept. of Orthop. Surg., Nokami Kosei General Hosp., Wakayama, Japan Takuji Matsumoto
- 1-3-SY3-4 Extraction of vertebral fractures by trabecular bone score (TBS) ..... S41  
Dept. of Orthop. Surg., Tokushima Univ., Japan Yasuyuki Omichi
- 1-3-SY3-5 Examination of risk factors for new vertebral compression fractures using dual-energy X-ray absorptiometry and Fracture Risk Assessment Tool ..... S42  
Dept. of Orthop. Surg., Yokohama Ekisaikai Hosp. Masamitsu Tomioka

**Noontime Lecture 3**

(12 : 00~13 : 00)

**Chair: A. Sudo**

- 1-3-NL3-1 Osteoporosis up to date ..... S129  
 The Jikei Univ. School of Medicine, Dept. of Orthop. Surg., Tokyo, Japan      Mitsuru Saito

**Panel Discussion 3 Atypical fractures: Current status & challenges**

(14 : 30~16 : 00)

**Chairs: A. Sudo  
T. Niikura**

- 1-3-PD3-1 Incidence and medical management of atypical femoral fractures in a university hospital : Are atypical femoral fractures preventable? ..... S82  
 Dept. of Emergency and Critical Care Medicine, Keio Univ. School of Medicine      Kazuhiko Udagawa
- 1-3-PD3-2 Prevalence of precursory signs for atypical femoral fractures in bone metastatic patients with bone-modifying agent use: A cross-sectional study S83  
 Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ., Tokyo, Japan      Takumi Kaku
- 1-3-PD3-3 Examination of treatment for atypical femoral fractures ..... S84  
 Orthop., Meijibashi Hosp., Osaka, Japan      Kunihiro Suzuki
- 1-3-PD3-4 Open reduction for atypical femoral fractures including periprosthetic fractures ..... S85  
 Onomichi Municipal Hosp.      Yukimasa Okada
- 1-3-PD3-5 A case of performing TAVI and osteosynthesis on the same day against atypical femoral fracture with severe aortic stenosis ..... S86  
 The Dept. of Orthop. Surg., Kurume Univ. Hosp., Kurume, Japan      Hikaru Kitagawa
- 1-3-PD3-6 Ipsilateral femoral neck fracture after treatment of atypical femoral fracture ..... S87  
 Sakai Medical Center, Orthop. Surg., Sakai, Japan      Kouki Hosozawa

**Evening Seminar 1**

(16 : 00~17 : 20)

**Chair: K. Ikeda**

- 1-3-ES1-1 UPDATE on diagnosis and treatment of carpal bone fracture and nonunion ..... S153  
 The Dept. of Orthop. Showa Univ. Northern Yokohama Hosp.      Keikichi Kawasaki

## Day1 • Room 4 (PACIFICO YOKOHAMA, Conference Center 5F 502)

### Symposium 4 Distal radius fractures

(8 : 30～10 : 00)

Chairs: Y. Abe  
K. Kawasaki

1-4-SY4-1	Arthroscopic Reduction Technique for Lunate Facet Fragment of Distal Radius Fractures .....	S43
	Dept. of Orthop. Surg., School of Medicine, Kurume Univ., Japan	Shiro Yoshida
1-4-SY4-2	Intra-articular screw penetration after volar locking plate fixation for distal radius fractures .....	S44
	Hand and Elbow Surg. Center, Dept. of Orthop. Surg., Kawasaki Municipal Kawasaki Hosp.	
	Masao Nishiwaki	
1-4-SY4-3	Comparison with Different Mechanism Locking Plate Fixation for Volarly Displaced Intra-articular Fractures of Distal Radius with Volar Lunate Facet Fragments.....	S45
	Dept. of Orthop. Surg. and Hand Surg. Center, International Goodwill Hosp.	Kozo Morita
1-4-SY4-4	The Possibility of Repairing Distal Radius Fracture Accompanied by Volar Rim Fragment with Sole Use of Initial R Xpert2.4 Volar Rim Plate .....	S46
	Dept. of Orthop. Surg., Hand Surg. and Trauma Reconstruction Center, Juntendo Univ. Urayasu Hosp., Chiba, Japan	Satoshi Ichihara
1-4-SY4-5	Clinical significance of the image fusion system in the osteosynthesis of distal radius fractures .....	S47
	Dept. of Orthop. Surg., Tokyo Medical Univ. Ibaraki Medical Center	Yuichi Yoshiii
1-4-SY4-6	Volar plating for distal radius fractures using drill sleeve with locking mechanism and Lowman bone holding clamps .....	S48
	Dept. of Orthop. Surg., Tokyo Saiseikai Central Hosp., Tokyo, Japan	Makoto Kameyama

**Symposium 5 Treatment strategies for elbow dislocation with fractures**

(10 : 10~11 : 40)

**Chairs:** J. Imatani  
S. Iwabu

1-4-SY5-1	Surgical approach for elbow fracture-dislocation injury according to its patterns of injury .....	S49
	The Dept. of Orthop. Surg., Japanese Red Cross Aichi Medical Center Nagoya Daini Hosp. Hideyoshi Sawada	
1-4-SY5-2	Clinical results and complications of the hinged external fixation for the treatment of unstable elbow fracture dislocations .....	S50
	Hand Surg. Center, National Hosp. Organization Murayama Medical Center, Tokyo, Japan Naoki Kato	
1-4-SY5-3	Treatment of dislocation fractures of the elbow joint at our clinic: suture button fixation for coronoid fractures and treatment of difficult cases of proximal radius fractures .....	S51
	Dept. of Orthop. Surg., Yao Tokushukai General Hosp. Yoshihiro Dohi	
1-4-SY5-4	Surgical approaches of posterior olecranon fracture dislocations based on osteoligamentous injuries: a retrospective case series .....	S52
	Orthop. Trauma Center, Shonan Kamakura General Hosp. Kentaro Futamura	
1-4-SY5-5	Clinical status of complex elbow instability .....	S53
	The Dept. of Orthop. Surg., Omur City Hosp., Omur, Japan Kensuke Sakai	

**Noontime Lecture 4**

(12 : 00~13 : 00)

**Chair:** J. Imatani

1-4-NL4-1	Casting and splinting technique for conservative treatment of fractures...	S130
	The Dept. of Orthop. Surg., Nishinomiya Watanabe Hosp., Nishinomiya, Japan Satoshi Takahata	

#### Panel Discussion 4 AI and Diagnostic Imaging

(14 : 30~16 : 00)

Chairs: K. Sato  
M. Ito

1-4-PD4-1	Examination of a nearly free method using 3DCT for offset nail selection in proximal femoral fracture surgery .....	S88
	Dept. of Orthop. Surg., Fushimi-Momoyama Hosp., Kyoto, Japan	Ikufumi Yamada
1-4-PD4-2	Prediction of tibial shaft delayed union and nonunion using artificial intelligence .....	S89
	Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Kakogawa, Japan	Shunsuke Takahara
1-4-PD4-3	The combination of digital templates and 3DCT lateral views can lead to useful surgical strategies for femoral trochanteric fractures with lateral wall fractures .....	S90
	Dept. of Orthop. Surg., Nokami Kosei General Hosp., Wakayama, Japan	Takuji Matsumoto
1-4-PD4-4	Effectiveness of ultrasonographic evaluation for nerve palsies associated with humeral fractures during the operation .....	S91
	Dept. of Orthop. Hand and Microsurg. Center, Osaka Ekisaikai Hosp.	Yoshitaka Tanaka
1-4-PD4-5	Echocardiographic and radiographic features of the Pink Pulseless Hand in pediatric supracondylar fractures of the humerus .....	S92
	Dept. of Orthop. Surg., Fujigaoka Hosp. Showa Univ.	Tomohiro Yasuda
1-4-PD4-6	Improvement of results of Jensen classification for intertrochanteric fracture using deep learning .....	S93
	The Dept. of Orthop., Nishi Hosp.	Mitsuaki Noda

#### Evening Seminar 2

(16 : 00~17 : 20)

Chair: N. Takenaka

1-4-ES2-1	Effectiveness of LIPUS in bone reconstruction with severe fragility fracture and extremity trauma .....	S154
	Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine	Koji Nozaka

# Day1 • Room 5 (PACIFICO YOKOHAMA, Conference Center 3F 301)

## Award-Nominated Presentations

(8 : 30～10 : 00)

Chairs: E. Shoda  
A. Mogami

- 1-5-AW-1 Location of fractures and bone mineral density in patients with rheumatoid arthritis: A retrospective cohort study ..... S121  
Hyogo Prefectural Kakogawa Medical Center, Hyogo, Japan Ryo Okada
- 1-5-AW-2 Biomechanics of the ulno-dorsal fragment in distal radius fractures ..... S121  
Dept. of Hand Surg., Nagoya Univ., Nagoya, Japan Hidemasa Yoneda
- 1-5-AW-3 To be negative deep tissue culture is a good indicator of appropriate debridement surgery ..... S122  
Dept. of Musculoskeletal Traumatology and Reconstructive Surg., Hiroshima Univ. Rikuo Shinomiya
- 1-5-AW-4 Gram-negative antibiotic coverage in Gustilo type III open fractures does not reduce surgical site infection: analysis of DOTJ registry ..... S122  
Trauma and Reconstruction Center, Teikyo Univ. Hosp., Tokyo, Japan Takashi Suzuki
- 1-5-AW-5 Examination of surgical treatment for Vancouver classification Pseudo AL, B2 and Baba classification 1A using finite element analysis ..... S123  
Dept. Orthop. Surg., Oyumino Central Hosp. / Dept. of Orthop. Surg., Eastern Chiba Medical Center Takayuki Nakajima
- 1-5-AW-6 Postoperative activities of daily living in elderly patients with proximal femur fractures are associated with pre-hospital living arrangements, bone mineral density, malnutrition and psychiatric disorders ..... S123  
Dept. of Orthop. Surg., Nokami Kosei General Hosp., Wakayama, Japan Takuji Matsumoto
- 1-5-AW-7 Reliability of 683 patients intertrochanteric fracture with AO classification -XP vs CT- ..... S124  
The Dept. of Orthop., Nishi Hosp. Mitsuaki Noda
- 1-5-AW-8 The morphological characteristics of posterior fragment associated with postoperative sagittal swing motion of short femoral nail in the treatment of pectrochanteric fractures ..... S124  
Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Hyogo, Japan Ryota Nishida

Day 1  
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**Main Theme 1 Femoral trochanteric fractures (1)**

(10 : 20~11 : 20)

Chair: Y. Yamakawa

- 1-5-MT1-1 Difference of gamma nailing spot on gluteus medius -tip of greater trochanter vs Bald spot ..... S157  
The Dept. of Orthop., Nishi Hosp. Mitsuaki Noda
- 1-5-MT1-2 Comparative study of the lag screw ruote between the offset nail and the straight nail in trochanteric fracture ..... S157  
Dept. of Orthop. Surg., Toyamakensaiseikaitakaoka Hosp. Junya Yoshitani
- 1-5-MT1-3 142mm True Japanese MIYABI-Nail for the Elderly; Clinical Results of 279 Cases ..... S158  
Ibaraki Prefectural Central Hosp. Hiroshi Hayashi
- 1-5-MT1-4 Blade anteversion of femoral trochanteric fracture treated by TFNA long nail ..... S158  
The Dept. of Orthop. Surg., Higashisumiyoshimorimoto Hosp., Osaka, Japan Makoto Oka
- 1-5-MT1-5 Examination of the suitability of offset nails for femoral trochanteric fractures ..... S159  
Dept. of Orthop. Surg., Kumamoto Chuo Hosp., Kumamoto, Japan Yasuyuki Abe
- 1-5-MT1-6 Clinical outcomes of femoral trochanteric fractures tereated with ASULOCK ..... S159  
Dept. of Orthop. Surg., Suzuka General Hosp., Mie, Japan Masakazu Morikawa

**Noontime Lecture 5**

(12 : 00~13 : 00)

Chair: M. Tokunaga

- 1-5-NL5-1 Fixation of posterior lateral fragment of trochanteric femoral fractures -How and why do we fix it?- ..... S131  
The Dept. of Orthop. Surg., Kainan Hosp., Yatomi, Japan Naoya Takada
- 1-5-NL5-2 The effect of posterolateral fragment on the treatment of trochanteric femoral fracture: a biomechanical study ..... S132  
Nagoya City Univ. East Medical Center, Aichi, Japan Takuya Usami

**Main Theme 2 Femoral subtrochanteric fractures**

(14 : 30~15 : 30)

Chair: K. Oe

- 1-5-MT2-1 Examination of the risk of delayed union and nonunion that occur in AO/OTA 31A3 fractures treated with middle femoral nail ..... S160  
Kimitsu Chuo Hosp., Chiba, Japan Hiroki Funaishi
- 1-5-MT2-2 Is the cement augmentation effective for the treatment of subtrochanteric fractures? ..... S160  
Dept. of Orthop. Surg., Shikoku Medical Center for Children and Adults Takahiro Sasa
- 1-5-MT2-3 New generation Reconstruction nail for femoral subtrochanteric fracture S161  
Senri Hosp., Saiseikai, Osaka, Japan Akane Koyama
- 1-5-MT2-4 Conformity of Long Nails with strong curvature to the femur  
- Postoperative evaluation Using CT ..... S161  
Kagawa Rosai Hosp., Kagawa, Japan Tomoki Uzu
- 1-5-MT2-5 Treatment experience of subtrochanteric fracture of femur in lateral position ..... S162  
Nagasaki Medical Center Keita Yamaguchi

**Main Theme 3 Femoral trochanteric fractures (2)**

(15 : 40~16 : 40)

Chair: T. Mae

- 1-5-MT3-1 Insertion of anterior support screw (AS2) with ZNN CM Fortis nail for femoral trochanteric fractures ..... S162  
The Dept. of Orthop. Surg., National Hosp. Organization, Iwakuni Medical Center, Yamaguchi, Japan Kouki Kawada
- 1-5-MT3-2 Accuracy verification of posterolateral fragment fixation of femoral intertrochanteric fracture using APOLLOFIX® ..... S163  
Dept. of Orthop. Surg., Kashiba Seiki Hosp. Yoshiharu Kusabiraki
- 1-5-MT3-3 Treatment for femoral trochanteric fracture using ASULOCK ..... S163  
Dept. of Orthop., Chikamori Hosp., Kochi, Japan Takashi Inokuchi
- 1-5-MT3-4 The study of retrograde cement filling in TFNA cement augmentation ... S164  
Kaneda Hosp. Yusuke Mochizuki
- 1-5-MT3-5 The effect of cement augmentation for preventing varus deformity after intramedullary fixation TFNA in pertrochanteric fracture ..... S164  
Dept. of Orthop. Surg., Hyogo Prefectural Nishinomiya Hosp., Nishinomiya, Hyogo, Japan Shin Yoshida
- 1-5-MT3-6 The Changes of the postoperative reposition in femoral trochanteric fractures treated by ASULOCK ..... S165  
Kyoto Tanabe Central Hosp., Kyoto, Japan / Akashi City Hosp., Hyogo, Japan Taisuke Kunitomo

**Main Theme 4 Femoral trochanteric fractures (3)**

(16 : 50~17 : 50)

**Chair: Y. Yasuhara**

- 1-5-MT4-1 The combination of lag crown reamer and augmentation prevents postoperative anterior wall fractures in intramedullary nailing of femoral intertrochanteric fractures ..... S165  
Dept. of Orthop. Surg., Nokami Kosei General Hosp., Wakayama, Japan Takuji Matsumoto
- 1-5-MT4-2 Evaluation for the reduction position of the femoral trochanteric fractures by the new technique using the custom order awl ..... S166  
Dept. of Orthop. Surg., Asao General Hosp. Toshiro Yonezawa
- 1-5-MT4-3 A Comparative Study of Postoperative Outcome of Middle Nail and Long Nail for Femoral Intertrochanteric Fractures ..... S166  
Dept. of Orthop. Surg., Kochi Prefectural Hata Kenmin Hosp. Dai Ohira
- 1-5-MT4-4 Effect of hydroxyapatite tubes on the lag screw intraoperative insertion torque for the treatment of intertrochanteric femoral fractures ..... S167  
Dept. of Orthop. Surg., Kainan Hosp. Aichi Prefectural Welfare Federation of Agricultural Cooperatives, Yatomi, Japan Hidetoshi Iwata
- 1-5-MT4-5 Three cases of penetrating fractures of the femoral metatarsus requiring open reduction internal fixation ..... S167  
Dept. of Orthop. Surg., Jichi Medical Univ. Hosp., Tochigi, Japan Takamitsu Ooyama
- 1-5-MT4-6 The diagnostic potential of unstable pertrochanteric femoral fractures using artificial intelligence -Prediction from radiographs to CT classification- ... S168  
Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Hyogo, Japan Ryota Nishida

## Day1 • Room 6 (PACIFICO YOKOHAMA, Conference Center 3F 302)

### Main Theme 5 Thoracic cage fractures & Scapula fractures

(8 : 30～9 : 30)

Chair: T. Mondori

- 1-6-MT5-1 Shoulder instability of Ideberg type I glenoid fractures ..... S168  
Dept. of Orthop. Surgery, Chugoku Rosai Hosp., Hiroshima, Japan Yoshihiro Nakamura
- 1-6-MT5-2 Supination or pronation displacement remaining in scapular body fracture causes limitation of shoulder joint range of motion ..... S169  
Hyogo Emergency Medical Center, Dept. of Orthop. Surg., Kobe City, Japan Keitaro Tada
- 1-6-MT5-3 Evaluation of the position of a cannulated cancellous screw for coracoid process fracture ..... S169  
Dept. of Orthop. Surg., Tokai Univ. School of Medicine Takeshi Imai
- 1-6-MT5-4 Surgical treatment of scapular glenoid fracture Ideberg-Goss classification type V and VI ..... S170  
Dept. of Orthop. Surg., Surgical Science, Tokai Univ. School of Medicine, Kanagawa, Japan Shiho Wasai
- 1-6-MT5-5 Experience of using Matrix RIB for Multiple Rib Fractures ..... S170  
Sakai City Medical Center, Osaka, Japan Masanori Kawamoto
- 1-6-MT5-6 Outcomes and challenges of osteosynthesis using the Matrix rib plate system@ for multiple rib fractures ..... S171  
Emergency and Critical Care Medicine, Saitama Medical Center, Saitama Medical Univ. Yuta Tanuma

Day 1  
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**Main Theme 6 Clavicle fractures (1)**

(9 : 40~10 : 40)

Chair: S. Oki

- 1-6-MT6-1 Long-term consequence of conservative treatment for midshaft clavicle fractures ..... S171  
The Dept. of Orthop. Chugoku Rosai Hosp., Kure, Japan Yuki Matsubara
- 1-6-MT6-2 Clinical results of anterior inferior MIPO using VA-LCP Anterior Clavicle Plate for clavicle diaphyseal fracture ..... S172  
Dept. of Orthop. Surg., Tokushima Prefectural Kaifu Hosp., Tokushima, Japan Hayato Hamaguchi
- 1-6-MT6-3 Surgical Treatment of the Clavicle shaft fracture with Flex-Thread Clavicle Nail ..... S172  
Dept. of Orthop. Surg., Fujita Health Univ., Aichi, Japan Yusuke Kawano
- 1-6-MT6-4 Orthogonal double-plate fixation for nonunion of midshaft clavicle fractures: A report of 3 cases ..... S173  
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(10 : 50~11 : 50)

Chair: K. Sakai

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(14 : 30~15 : 30)

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- 1-6-MT8-2 Deltoid Muscle atrophy following proximal humeral fracture ..... S178  
Dept. of Orthop. Surg., Kochi Health Sciences Center, Kochi, Japan Yasuaki Yamakawa
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- 1-6-MT8-5 The radiographic and clinical outcome of ORIF using the femoral head allograft for comminuted proximal humeral fractures ..... S179  
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(15 : 40~16 : 40)

Chair: T. Shintaku

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- 1-6-MT9-2 Experience in the treatment of arterial injuries associated with proximal humerus fractures ..... S181  
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- 1-6-MT9-3 Treatment for proximal humeral fractures in elderly and consideration of poor outcome factors ..... S181  
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- 1-6-MT9-4 The results of our treatment for proximal humerus fracture by AFFIXUS natural nail ..... S182  
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(8 : 30~9 : 30)

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- 1-7-MT10-2 Surgical treatment of tibial plateau fracture using O-arm mobile CT:  
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- 1-7-MT10-3 Treatment of proximal tibial fractures with posterior fragments by ankle T plate ..... S184  
Kumamoto Orthop. Hosp., Kumamoto, Japan Takuya Ikuta
- 1-7-MT10-4 A case of extended anterolateral approach combined with Lateral femoral epicondylar osteotomy for tibial plateau fracture with posterolateral bone fragments ..... S184  
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(9 : 40~10 : 40)

Chair: S. Toyoda

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(10 : 50~11 : 50)

Chair: K. Kanazawa

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- 1-7-MT12-2 Association between AOFAS and perioperative factors in ankle malleolar fractures with posterior malleolar fragment less than 25% ..... S188  
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(12 : 00~13 : 00)

Chair: T. Noda

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(14 : 30~15 : 40)

Chair: T. Fukuhara

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Dept. of Critical Care Medicine and Trauma, National Disaster Medical Center	Tsuyoshi Hishikawa
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(15 : 40~16 : 40)

Chair: K. Futamura

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- 1-7-MT14-2 Surgical treatment for fragility fracture of pelvis improves proper load factor within 2weeks postoperatively ..... S194  
Dept. of Emergency Orthop. Trauma Surg., Fujita Health Univ. Hosp. Masahiro Yoshida
- 1-7-MT14-3 What affects the walking ability in elderly patients with acetabular fracture? ..... S194  
Altitude Emergency and Critical Care Medical Center, Oita Univ. Hosp., Oita, Japan Tomonori Sakamoto
- 1-7-MT14-5 Our clinical outcomes of fragility fractures of the pelvis: Effect of waiting time to surgery on complications ..... S195  
Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine, Kyoto, Japan / Dept. of Orthop. Surg., Kyoto Kizugawa Hosp., Kyoto, Japan Naoyuki Horie
- 1-7-MT14-6 Surgical treatment for fragility fractures of the pelvis with spinal instrument ..... S195  
National Hosp. Organization Okayama Medical Center Yuya Eri

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(16 : 50~17 : 50)

Chair: J. Imanishi

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- 1-7-MT15-3 Clinical study of preoperative skeletal muscle mass as a predictor of physical performance recovery following palliative surgery for spinal metastases ..... S197  
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- 1-7-MT15-5 Prognostic value of BMI in long bone metastasis with impending fracture ..... S198  
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- 1-7-MT15-6 Prediction of femoral pathological fracture by combination of multiple methods ..... S198  
Dept. of Orthop. Surg., Tokushima Univ., Japan Yasuyuki Omichi

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### Oral 1 Ankle

(8 : 20~9 : 20)

Chair: Y. Samejima

- 1-8-01-1 A study of poor outcome cases of medial ankle fractures ..... S281  
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- 1-8-01-2 A case of subtalar dislocation fracture with anterior talofibular ligament injury ..... S281  
Dept. of Orthop. Surg., Furano Hosp., Furano City, Japan Go Sato
- 1-8-01-3 Effectiveness of temporary external fixation on ankle fracture-dislocation:  
Evaluation of long-term functional outcome ..... S282  
Dept. of Orthop. Surg., Trauma Center, Saga-ken Medical Centre Koseikan, Saga, Japan Nobuaki Tsukamoto
- 1-8-01-4 Examination of the malreduction of posterior malleolus fragments in ankle  
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Okayama Rosai Hosp. Akihiro Kanamaru
- 1-8-01-5 A study of triplane fracture cases in our hospital ..... S283  
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- 1-8-01-6 Postoperative outcomes of ankle fractures with early weight bearing ..... S283  
Japanese Red Cross Society Wakayama Medical Center, Wakayama, Japan Naoki Takemoto
- 1-8-01-7 Surgical treatment of displaced epiphyseal injuries of the distal tibia ..... S284  
Dept. of Orthop. Surg., Suzuka General Hosp., Mie, Japan Yuichiro Nakayama

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**Oral 2 Fractures around the knee**

(9 : 30~10 : 30)

**Chair: T. Matsumoto**

- 1-8-02-1 A case of femoral supracondylar fracture treated with a retrograde intramedullary nail and augmentation plate ..... S284  
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- 1-8-02-2 Intra-articular osteotomy for treatment of complex tibial plateau fracture; A case report ..... S285  
Toukeikai Kyoritsu Hosp., Hokkaido, Japan Takashi Tsumura
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Dept. of Orthop. Surg., Okayama Univ. Graduate School of Medicine, Dentistry, and Pharmaceutical Science Shiro Fukuoka
- 1-8-02-4 Osteosynthesis for Hoffa fracture using Periarticular Proximal Humerus Plate : Two Case Reports ..... S286  
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- 1-8-02-5 Adolescent distal femoral epiphysiolytic treated with Distal Femur Plate: a case report ..... S286  
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- 1-8-02-6 A case of Hoffa's fracture developed in a femoral and tibial fracture at the same time treated by median approach ..... S287  
Dept. of Orthop. Surg., Senreikai Harima Hosp. Fumiaki Okada
- 1-8-02-7 Characteristics of osteoarthritis due to fracture as an indication for knee replacement surgery ..... S287  
Fukuoka Orthop. Hosp., Fukuoka, Japan Takahiro Yamaguchi

### Oral 3 Pilon fractures & Distal lower leg fractures

(10 : 40~11 : 40)

Chair: K. Ogawa

- 1-8-03-1 CT based study of relationship between the end-point of the intramedullary nail I and angular malalignment for distal tibia fractures ..... S288  
Dept. of Orthop. Surg., Fukuyama City Hosp., Hiroshima, Japan Chuji Terada
- 1-8-03-2 Postoperative external fixator for distal tibial fracture ..... S288  
Gifu Prefectural General Medical Center Hiroyuki Tanahashi
- 1-8-03-3 Posterior pilon fractures treated with posteromedial approach ..... S289  
Dept. of Orthop. Surg. and Sports Medicine General Medical Center, Kawasaki Medical School Yuki Hanai
- 1-8-03-4 Intramedullary nail fixation for distal tibial fractures ..... S289  
Dept. of Orthop. Surg., Kisiwada Tokushukai Hosp. Satoshi Hayashi
- 1-8-03-5 Clinical outcomes of intramedullary nailing with anterior plate for Pilon fracture: report of ten cases ..... S290  
Dept. of Orthop. Surg., Surgical Science, Tokai Univ. School of Medicine, Kanagawa, Japan Yasuyuki Sogo
- 1-8-03-6 A Case of Primary Arthrodesis by Retrograde Tibiotalocalcaneal Nailing for Tibial Pilon and Talus Fractures ..... S290  
Dept. of Orthop. Surg., TOYOTA Memorial Hosp., Toyota, Japan Yuko Takeuchi

### Noontime Lecture 8 Perioperative pain management! Aiming for Pain-Free Fracture Treatment

(12 : 00~13 : 00)

Chair: T. Sato

- 1-8-NL8-1 How should we use acetaminophen for perioperative management in patients with fractures? ..... S135  
Dept. of Anesthesia and Intensive Care Medicine, Akita Univ. Graduate School of Medicine, Akita, Japan Yukitoshi Niizymama
- 1-8-NL8-2 Dose scheduled acetaminophen medication method for postoperative pain control in Fragility Hip Fracture with early operation ..... S136  
Dept. of Traumatology, Fukushima Medical Univ., Fukushima, Japan / Trauma Center, Southern Tohoku Research Institute for Neuroscience, Fukushima, Japan Nobuyuki Takenaka

**Oral 4 Distal tibial shaft fractures**

(14 : 30~15 : 30)

Chair: M. Ban

- 1-8-04-1 Clinical characteristics of posterior malleolar fractures associated with tibial shaft spiral fractures ..... S291  
Kobe City Medical Center General Hosp., Hyogo, Japan Shinnosuke Yamashita
- 1-8-04-2 Are spiral fractures of the lower leg diaphysis due to external rotation forces related to the original external torsion of the tibia? ..... S291  
Traumatology and Reconstructive Surg. Center, Aizu Chuo Hosp., Aizuwakamatsu City, Japan / Dept. of Traumatology and Reconstructive Surg., Fukushima Medical Univ. School of Medicine, Fukushima City, Japan Satoshi Hatashita
- 1-8-04-3 Treatment for tibial fractures using the lateral parapatellar approach ..... S292  
Dept. of Orthop. Surg., Univ. of Yamaguchi, Ube, Japan Toshihiro Seki
- 1-8-04-4 Semi-extended approach for distal tibial diaphyseal fractures does not worsen postoperative ankle joint alignment ..... S292  
Dept. of Orthop. Surg., Okayama Univ. Graduate School of Medicine, Dentistry, and Pharmaceutical Science Shiro Fukuoka
- 1-8-04-5 The new treatment strategy of ipsilateral multi-level tibial fracture  
- Two cases of using distal tibial nail - ..... S293  
The Dept. of Orthop. Surg., Kochi 1 Health Sciences Center, Kochi, Japan Ryuichiro Okuda

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(8 : 20~9 : 20)

Chair: K. Ichimura

- 1-9-05-1 Treatment results for proximal femur fractures in the very elderly (90 years and older) ..... S293  
Sainokuni Higashiomiyia Medical Center, Saitama, Japan Ryosuke Kagawa
- 1-9-05-2 Skeletal muscle mass in patients with proximal femur fractures  
-Comparison with TKA patients ..... S294  
Saiseikai Nakatsu Hosp. Orthop. Surg. Shiro Okazaki
- 1-9-05-3 Waiting time for hip fracture surgery: types of operation, mortality, complications, physical status ..... S294  
Ibaraki Seinan Medical Center Hosp. Tomomi Kotaki
- 1-9-05-4 The effect of preoperative nutritional status on postoperative rehabilitation outcomes in elderly patients with proximal femoral fracture ..... S295  
Dept. of Rehabilitation, Toho Univ. Ohashi Medical Center, Tokyo, Japan Shota Shimoyama
- 1-9-05-5 Ideal timing to evaluate mobility after hip fractures in elderly patients ... S295  
The Dept. of Physical Therapy, SAISEIKAI OTARU Hosp., Otaru, Japan Ryosuke Sugawara

### Oral 6 Proximal femoral fractures (2)

(9 : 30~10 : 30)

Chair: T. Akasaka

- 1-9-06-1 Injury mechanism of hip fractures in two hospitals with different surroundings ..... S296  
Chiba Univ. Hosp., Chiba, Japan Akitoshi Sakuma
- 1-9-06-2 The relationship between nutritional status and postoperative delirium in proximal femoral fractures ..... S296  
The Dept. of Orthop. Surg., Red Cross Kobe Hosp., Kobe, Japan Tomoko Kanazawa
- 1-9-06-3 The efficacy of aspirin for prevention of venous thromboembolism (VTE) after hip fracture surgery ..... S297  
Dept. of Orthop. Surg. Japanese Red Cross Kobe Hosp., Kobe, Japan Takao Ohmori
- 1-9-06-4 Investigating the effects of continued perioperative antiplatelet agent and anticoagulant in patients with hip fracture ..... S297  
Sanda City Hosp. Hyuma Kondo
- 1-9-06-5 Changes in perioperative serum zinc levels of proximal femoral fracture S298  
Dept. of Orthop. Surg., Kyorin Univ. School of Medicine, Tokyo, Japan Masato Nishino

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## Oral 7 Femoral shaft fractures

(10 : 40~11 : 40)

Chair: S. Obara

- 1-9-07-1 Difference in bone union rates depending on the fracture type of the main bone fragments in comminuted femoral shaft fracture ..... S298  
Advanced Emergency Medical Service Center, Kurume Univ. Hosp., Kurume, Japan      Toru Matsugaki
- 1-9-07-2 Ingenuity in treatment for ipsilateral femur fracture after proximal femur fracture in the elderly ..... S299  
Juntendo Univ. Shizuoka Hosp., Shizuoka, Japan      Fumitoshi Hatae
- 1-9-07-3 Treatment strategy for double fractures of femur ..... S299  
Advanced Critical Care Center, Gifu Univ. Hosp.      Takahito Miyake
- 1-9-07-4 Clinical results of surgical treatment for femoral combined fracture ..... S300  
Dept. of Orthop. Surg., Kitasato Univ. School of Medicine, Kanagawa, Japan      Shintaro Shoji
- 1-9-07-5 A case report of refracture after femoral shaft fracture deformity fusion, treated by intramedullary nail fixation combined with osteotomy ..... S300  
The Dept. of Orthop. Surg., Kyoto Okamoto Memorial Hosp.      Hajime Mori
- 1-9-07-6 Bilateral distal transverse femoral stem fractures treated with different strategies; A case report ..... S301  
Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine      Yuta Shimizu
- 1-9-07-7 A case of complete diaphysis fracture after treatment of atypical femoral incomplete fracture by ender method ..... S301  
Dept. of Orthop. Surg., North Medical Center Kyoto Prefectural Univ. of Medicine, Kyoto, Japan      Mizuki Asano

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(12 : 00~13 : 00)

Chair: H. Minehara

- 1-9-NL9-1 Do you think Superior approach using BHA for femoral neck fracture difficult?  
- Good indications and improvements in technique - ..... S137  
Dept. of Orthop. Surg., Kawasaki Hosp., Osaka, Japan      Keisuke Hagio
- 1-9-NL9-2 Rehabilitation course of BHA using Superior approach for femoral neck fracture  
- Points for improvement in the rehabilitation program - ..... S138  
Dept. of Rehabilitation Services, Kawasaki Hosp., Osaka, Japan      Kazuhisa Aikawa

**Oral 8 Pathological fractures**

(14 : 30~15 : 30)

Chair: E. Osaka

- 1-9-08-1 A case in which a retrograde intramedullary nail surgery was possible for a fracture of the femoral shaft in a terminal cancer patient with conduction anesthesia ..... S302  
Dept. of Orthop. Surg., Dokkyo Medical Univ. Saitama Medical Center Ryota Shinada
- 1-9-08-2 Surgical outcome for bone metastasis of the femur ..... S302  
Dept. of Orthop. Surg., Kitasato Univ., Kanagawa, Japan Terumasa Matsuura
- 1-9-08-3 Postoperative results in intramedullary nail insertion cases of long bone metastasis ..... S303  
Ibaraki Prefectural Central Hosp., Ibaraki, Japan Yuki Ishibashi
- 1-9-08-4 A case of imminent atypical femur fracture with severe lateral bowing and distal femur fracture ..... S303  
Matsunami General Hosp., Gifu, Japan Ryotya Okuda
- 1-9-08-5 Total femur replacement after bipolar hip arthroplasty for femoral bone metastasis of breast cancer. A case report ..... S304  
Dept. of Orthop. Surg., Tokyo Dental College Ichikawa General Hosp., Ichikawa, Japan Itsuo Watanabe
- 1-9-08-6 Two cases of lower limb metastatic bone tumor with multiple bone metastases ..... S304  
Nagasaki Medical Center Keisuke Mori

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### Oral 9 Femoral neck fractures

(8 : 20~9 : 20)

Chair: H. Tsuji

- 1-10-09-1 What femoral neck fracture types are risk of avascular necrosis of the femoral head and fixation failure? A retrospective study using the Garden classification with the addition of impacted fractures ..... S305  
Fukuiken-Saiseikai Hosp., Fukui, Japan Masahiro Kidera
- 1-10-09-2 Factors affecting postoperative outcome in displaced femoral neck fractures ..... S305  
Dept. of Orthop. Surg., Asahikawa Red Cross Hosp., Asahikawa, Japan Yuki Kamo
- 1-10-09-3 Case study: Re-operation after osteosynthesis using Hansson Pinloc for femoral neck fracture ..... S306  
Minami-nara General Medical Center, Nara, Japan Takahiro Furukawa
- 1-10-09-4 The results of ORIF of undisplaced femoral neck fracture in our hospital S306  
Dept. of Orthop. Surg., Seireimikatahara Hosp., Shizuoka, Japan Hironobu Bito
- 1-10-09-5 The incidence of avascular necrosis of femoral head in non-displaced femoral neck fracture with in-situ fixation ..... S307  
Japanese Red Cross Kobe Hosp., Hyogo, Japan Takeshi Ishihara
- 1-10-09-6 Clinical results of Hansson Pinloc for non-displaced femoral neck fracture S307  
Akashi Medical Center, Akashi, Japan Shinji Matsushima
- 1-10-09-7 Hip screws of the TresLock for internal fixation of basicervical fracture are properly inserted with in the femoral neck cannal ..... S308  
Dept. of Orthop. Surg. and Joint Surg. Centre, Takatsuki General Hosp., Osaka, Japan Yukiko Mutaguchi

**Oral 10 Femoral trochanteric fractures (1)**

(9 : 30~10 : 30)

Chair: S. Uta

- 1-10-O10-1 Epidemiology and treatment of trochanteric and subtrochanteric hip fractures in our hospital ..... S308  
Dept. of Orthop. Surg., Dept. of Rheumatology, Nippon Medical School, Tokyo, Japan      Yoshinori Obara
- 1-10-O10-2 Postoperative life expectancy of femoral neck fractures and femoral metaphyseal fractures in our hospital ..... S309  
Kanazawa Hosp.      Junnosuke Arima
- 1-10-O10-3 Association between postoperative reduced position in lateral radiograph and postoperative walking ability in femoral trochanteric fractures: a prospective cohort study ..... S309  
Teikyo Univ. School of Medicine, Univ. of Tokyo, Tokyo, Japan /  
Teikyo Univ. School of Medicine, Tokyo, Japan      Yutoshi Osaki
- 1-10-O10-4 Sagittal swing motion of short femoral nail for femoral trochanteric fractures ..... S310  
Dept. of Orthop. Surg., Naze Tokushukai Hosp., Amami, Japan      Minoru Kashiwara
- 1-10-O10-5 The assessment of postoperative pain with TFNA cement augmentation      S310  
Dept. of Orthop. Surg., Kyoto Kizugawa Hosp., Kyoto, Japan      Tomohito Ito
- 1-10-O10-6 Study of conservative treatment for occult femoral pertrochanteric fractures ..... S311  
Dept. of Orthop. Surg. and Joint Reconstructive Surg., Toyama Municipal Hosp., Toyama, Japan  
Rin Maeda
- 1-10-O10-7 A case series in which incomplete fractures were regarded as complete fractures during femoral pertrochanteric fracture surgery ..... S311  
JA Onomichi General Hosp., Hiroshima, Japan      Masaki Matsuura

**Oral 11 Femoral trochanteric fractures (2)**

(10 : 40~11 : 40)

**Chair: T. Fujimoto**

- 1-10-011-1 Relationship between the reduction and femoral neck anteversion after the osteosynthesis for intertrochanteric fracture of the femur ..... S312  
The Dept. of Orthop. Surg., Hamamatsu Univ. School of Medicine, Hamamatsu, Shizuoka  
Fumio Masuda
- 1-10-011-2 The CT value of the femoral head is a significant factor in predicting the stability of the lag screw ..... S312  
Dept. of Orthop. Surg., Kugayama Hosp. Gaku Michihiro
- 1-10-011-3 Clinical results for unstable femoral trochanteric fractures using INTERTAN middle nail ..... S313  
The Dept. of Orthop., Fukuyama City Hosp., Hiroshima, Japan Satoshi Ueda
- 1-10-011-4 CT based study for intraoperative cortical cracking of distal end of the nail and around the distal interlocking screws in femoral intramedullary nailing for trochanteric hip fractures in elderly ..... S313  
Dept. of Orthop. Surg., Fukuyama City Hosp., Hiroshima, Japan Katsuhiro Kawabata
- 1-10-011-5 Treatment strategies for nonunion after femoral trochanteric and subtrochanteric fracture surgery ..... S314  
Dept. of Orthop. Surg., Univ. of Miyazaki, Miyazaki, Japan Hiroyuki Imazato
- 1-10-011-6 Comparison of clinical outcomes between ASULOCK middle nail and JPFNA long nail for intertrochanteric fracture ..... S314  
Dept. of Orthop. Surg., Chikamori Hosp., Kochi, Japan Ippei Nishida
- 1-10-011-7 Comparison of lag screw telescoping and bone telescoping in the internal fixation for femoral trochanteric fractures ..... S315  
Dept. of Orthop. Surg., Naze Tokushukai Hosp., Amami, Japan Minoru Kashihara

**Noontime Lecture 10**

(12 : 00~13 : 00)

**Chair: T. Kurozumi**

- 1-10-NL10-1 Short Femoral Nail lag screw characteristics verified by biomechanics ... S139  
Dept. of Orthop. Surg. Artificial Joint / Joint Function Reconstruction Center, Oyumino Central Hosp.  
Takayuki Nakajima

**Oral 12 Femoral trochanteric fractures (3)**

(14 : 30~15 : 30)

Chair: T. Kawamura

- 1-10-012-1 Difficult-to-repair femoral metaphyseal fractures resulting from relatively high-energy injuries ..... S315  
Traumatology and Reconstructive Surg. Center Aizu Chuo Hosp. Noriyuki Chiba
- 1-10-012-2 Reconsideration of postoperative lateral view classification for unstable femoral trochanteric fractures ..... S316  
Orthop. Surg., Nishiwaki Municipal Hosp., Hyogo, Japan Tatsuya Ito
- 1-10-012-3 Clinical results of femoral trochanteric fractures using TFNA cement augmentation ..... S316  
Dept. of Orthop. Surg., Tokyo Hikifune Hosp., Tokyo, Japan Koji Seike
- 1-10-012-4 Comparison of osteosynthesis materials for femoral trochanteric fracture: usefulness of Unicorn Nail Wing ..... S317  
Orthop. Dept. of Okayama Medical Center, Okayama, Japan Tsubasa Hasegawa
- 1-10-012-5 Trochanteric figure 8 cabling (TFEC) added to intramedullary nail for segmental fractures of trochanteric fractures of the femur ..... S317  
Dept. of Orthop. Surg., Trauma and Microsurg. Center, Toyohashi Municipal Hosp., Toyohashi, Japan So Mitsuya
- 1-10-012-6 The adaption and complications of cement augmentation for trochanteric femur fractures ..... S318  
National Hosp. Organization Iwakuni Clinical Center Sho Muguruma
- 1-10-012-7 Examination of postoperative hospital length of stay depending on full bearing or restricted weight bearing after operate femoral trochanteric / subtrochanteric fracture ..... S318  
The Dept. of Orthop., Tosei General Hosp., Aichi, Japan Hiroki Yamada

**Oral 13 Femoral trochanteric fractures (4)**

(15 : 40~16 : 40)

Chair: A. Funayama

- 1-10-013-1 Examination of the delayed union cases in the femoral trochanteric fractures treated by ASULOCK ..... S319  
Kyoto Tanabe Central Hosp., Kyoto, Japan / Akashi City Hosp., Hyogo, Japan Taisuke Kunitomo
- 1-10-013-2 Does TFNA with cement augmentation improve treatment results of trochanteric fractures? ..... S319  
Dept. of Orthop. Surg., Konan Medical Center, Kobe, Japan Yu Sasaki
- 1-10-013-3 A comparative study of operative time and blood loss in unstable trochanteric fracture surgery using between INTERTAN short and middle nail ..... S320  
Saitama Red Cross Hosp., Saitama, Japan Shota Den
- 1-10-013-4 Suppressive effect of the offset nail on dislocation from anatomical to intramedullary type of femoral trochanteric fracture surgery ..... S320  
Dept. of Orthop. Surg., Towa Hosp., Tokyo, Japan Kazuhito Soma
- 1-10-013-5 Treatment with ASULOCK for trochanteric fracture of the femur ..... S321  
Dept. of Orthop., Univ. of Kurume, Fukuoka, Japan Yoshihiro Otsubo
- 1-10-013-6 Radiographic outcomes of Penetrated trochanteric fracture of the femur by fixation ..... S321  
The Dept. of Orthop. Surg., Fukuokashinmizumaki Hosp., Fukuoka, Japan Satoru Okuma
- 1-10-013-7 Results of use of anterior support screw (AS2) with ZNN CM Fortis nail for femoral trochanteric fractures ..... S322  
The Dept. of Orthop. Surg., National Hosp. Organization, Iwakuni Medical Center, Yamaguchi, Japan Kouki Kawada

## Day1 • Room 11 (PACIFICO YOKOHAMA, Conference Center 3F 315)

### Oral 14 Open fractures / Severe soft tissue injuries

(8 : 20~9 : 20)

Chair: K. Yamada

- 1-11-014-1 Three cases of bone grafting at the same time as internal fixation for bone defect of the open fracture of distal radius ..... S322  
The Dept. of Orthop. Surg., Dokkyo Medical Univ., Tochigi, Japan Kazutaka Ozone
- 1-11-014-2 The treatment of open fractures of the distal radius with or without temporary external fixation ..... S323  
Orthop. Trauma Center, Hyogo Prefectural Nishinomiya Hosp., Nishinomiya City, Japan Hitoshi Hirase
- 1-11-014-3 Indication of Temporary Vascular Shunt and strategy for popliteal artery injury ..... S323  
Trauma Center, Sapporo Higashi Tokushukai Hosp., Sapporo, Japan Yuta Izawa
- 1-11-014-4 Clinical prediction rule for deep infection in open long-bone fractures: a prospective cohort study ..... S324  
Dept. of Orthop. Surg., Teikyo Univ. School of Medicine, Tokyo, Japan / Trauma and Reconstruction Center, Teikyo Univ. School of Medicine, Tokyo, Japan Takahiro Inui
- 1-11-014-5 Treatment of the open tibial fracture using hexapod external fixator, the Ortho-SUV Frame followed by minimally invasive plate osteosynthesis: a case report ..... S324  
Dept. of Orthop. Surg., Ishikawa Prefectural Central Hosp., Kanazawa, Japan Munetomo Takata
- 1-11-014-6 A case of degloving injury of the foot successfully treated with iSAP ..... S325  
Emergency Dept., Osaka General Medical Center Takahiro Maekawa

### Oral 15 Infection (1)

(9 : 30~10 : 30)

Chair: Y. Kinami

- 1-11-015-1 Clinical outcomes of our continues antibiotics local perfusion ..... S325  
Dept. of Orthop. Surg., Kyoto Kizugawa Hosp., Kyoto, Japan Takashi Seya
- 1-11-015-2 SPECT/CT in osteomyelitis is useful in demonstrating the appropriate extent of the lesion, when to perform the debridement procedure ..... S326  
Trauma Reconstruction Center, Shinyurigaoka-General Hosp., Kawasaki, Japan Munenori Sato
- 1-11-015-3 Debridement for controlling the infection: Improving its quality ..... S326  
The Dept. of Orthop. Surg., National Hosp. Organization Kyoto Medical Center, Kyoto, Japan Hiroshi Yamamoto
- 1-11-015-4 A case of surgical site infection by nontuberculous mycobacteria after surgery of open fracture of the radius and ulna ..... S327  
Miyazaki Medical Association Hosp., Miyazaki, Japan Takafumi Kitabori

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**Oral 16 Infection (2)**

(10 : 40~11 : 40)

Chair: N. Kimata

- 1-11-016-1 A case report: elbow septic arthritis and humeral forearm osteomyelitis after surgery to fix the fracture subsided with continuous local antibiotics perfusion (CLAP) ..... S327  
Shoulder & Elbow Service, Funabashi Orthop. Sports Medicine & Joint Center, Funabashi, Japan  
Fumiya Hattori
- 1-11-016-2 Continuous local antibiotics perfusion for fracture-related infections on clinical outcomes ..... S328  
Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Kakogawa, Japan  
Shunsuke Takahara
- 1-11-016-3 Two cases of open lower leg fracture that developed agranulocytosis after CLAP ..... S328  
Nagaoka Red Cross Hosp., Niigata, Japan Hiroo Kawase
- 1-11-016-4 Influence of infection phase on fracture-related infections treatment by continuous local antibiotics perfusion: a multi-center study ..... S329  
Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Kakogawa, Japan / CLAP Research Group Shunsuke Takahara
- 1-11-016-5 Relationship between renal dysfunction caused by Continuous Local Antibiotics Perfusion (CLAP) and serum levels of gentamicin: A case series ..... S329  
Hyogo Prefectural Kakogawa Medical Center, Hyogo, Japan Ryo Okada

**Noontime Lecture 11**

(12 : 00~13 : 00)

Chair: S. Iwabu

- 1-11-NL11-1 How to perform reverse shoulder. Basic research on the positioning of SMR ..... S140  
Dept. of Orthop. Surg., Kitasato Univ. School of Medicine, Kanagawa, Japan Tomonori Kenmoku
- 1-11-NL11-2 Treatment Results and Assignments for SMR for Proximal Humerus Fractures ..... S141  
Dept. of Orthop. Surg. Surgical Science, Tokai Univ. School of Medicine, Kanagawa, Japan Yoshiyasu Uchiyama

**Oral 17 Calcaneus fractures**

(14 : 30~15 : 30)

Chair: Y. Nishii

- 1-11-017-1 Clinical results of calcaneal fractures operated by intramedullary absorbable implant fixation ..... S330  
The Dept. of Orthop. Surg., Kenwakai Otemachi Hosp., Fukuoka, Japan Tetsu Tsubone
- 1-11-017-2 Treatment results of calcaneal fractures using extended L-shaped incision S330  
Hitachi, Ltd. Hitachinaka General Hosp., Ibaraki, Japan Yu Watanabe
- 1-11-017-3 Percutaneous screw fixation followed by reduction using ring fixator for depression-type calcaneus fracture ..... S331  
Dept. of Orthop. Surg., Ishikawa Prefectural Central Hosp., Kanazawa, Japan Munetomo Takata
- 1-11-017-4 Surgical treatment for the avulsion fractures of calcaneal tuberosity ..... S331  
Dept. of Orthop. Surg., Suzuka General Hosp., Mie, Japan Nobuto Nagao
- 1-11-017-5 Usefulness of early period manual reduction for calcaneal beak fractures S332  
Foot and Ankle Surg. Center, East Maebashi Orthop. Hosp., Gunma, Japan Naohiro Hio
- 1-11-017-6 Clinical outcome of staged treatment with external fixation for severely comminuted calcaneal fracture with multiple trauma patients ..... S332  
Saitama Medical Center the Dept. of Advanced Emergency Medical Service Tomoki Kasahara
- 1-11-017-7 Operative treatment with locking plate fixation for calcaneal fracture:  
Comparison of extended L-shaped lateral approach and sinus tarsi approach ..... S333  
Dept. of Orthop. Surg., Fukuoka Seisyukai Hosp., Fukuoka, Japan Kazuki Kanazawa

**Oral 18 Foot****(15 : 40~16 : 40)****Chair: T. Ohata**

- 1-11-018-1 Withdrawn ..... S333
- 1-11-018-2 Relationship between surgical results of Lisfranc joint dislocation fracture and postoperative foot morphology ..... S334  
Osaka Medical and Pharmaceutical Univ., Osaka, Japan      Yohei Sano
- 1-11-018-3 Treatment of a fracture of the body of the talus (Sneppen classification type F) associated with Chopart's joint injury ..... S334  
Fukuoka Orthop. Hosp.      Kohei Ishihara
- 1-11-018-4 Surgical treatment of fifth metatarsal distal metaphyseal fracture using locking compression plate ..... S335  
Dept. of Orthop. Surg. Nishinomiya Kyoritsu Neurosurgical Hosp., Hyogo, Japan      Ken Tanaka
- 1-11-018-5 Treatment of the biphalangeal toe fracture nonunion at the site of fusion: two cases report ..... S335  
The Dept. of Orthop. Surg., Otsu Red Cross Hosp., Otsu City, Japan      Akihiro Itamoto
- 1-11-018-6 Outcomes of Boyd amputation for crush injury of the foot ..... S336  
Dept. of Traumatology and Critical Care Medicine, Osaka City Univ. Graduate School of Medicine  
Masahiro Miyashita

**Day1 • Room 12 (PACIFICO YOKOHAMA, Conference Center 4F 411+412)****Hands-on Seminar 1**

(9 : 30～11 : 30)

Chair: T. Sawaguchi

1-12-HS1-1 Get ready to start FLS tomorrow

Niigata Rehabilitation Hosp. Noriaki Yamamoto

**Hands-on Seminar 2 Ender Seminar**

(13 : 30～15 : 30)

Chair: K. Ando

1-12-HS2-1 Ender nailing for various fractures -compared to the gold standard-

Nishinomiya Watanabe Hosp. Satoshi Takahata

1-12-HS2-2 Ender nailing for pediatric fracture

Yokohamashintoshi Neurosurgical Hosp. Shu Obara