Program

Day 1　June 29（Thu）

Day1・Room 1（1F Medium Hall "Earth"）

Quick Review　Fracture OTAKU: Quick review of the papers in 2022
（6：50～7：50）　　**Chairs: N. Saka**
K. Shigemoto

1-1-QR-1　AI …… S23
Nagoya Univ. Graduate School of Medicine　Yoichi Sato

1-1-QR-2　Atypical Femoral Fracture …… S23
Dept. of Orthop. Surg., Osaka City General Hosp.　Yosuke Nagai

1-1-QR-3　Tibia plateau fracture …… S23
Teikyo Univ.　Takahiro Inui

1-1-QR-4　Pediatric femoral shaft fracture …… S23
Teikyo Univ.　Tomoo Nakagawa

1-1-QR-5　Proximal forearm fracture …… S23
Higashikawaguchi Hosp.　Shuya Takahashi

Invited Lecture1
（8：00～9：00）　　**Chair: M. Tokunaga**

1-1-IL1-1　Treatment of hyperextension tibial plateau fracture and related ligamental injuries …… S5
Dept. of Orthop. Surg., Shanghai JiaoTong Univ. 6th People's Hosp.　Luo Cong-Feng

Panel Discussion1　Postero-lateral fragment of Tibial plateau fracture
- Solutions for operative approach and fixation

(9：10〜10：35)

Chairs: H. Minehara
S. Kitada
Commentator: Luo Cong-Feng

1-1-PD1-1　Treatment Strategy for the Posterolateral Fragment in Tibial Plateau Fracture ····· S127

Dept. of Musculoskeletal Traumatology, Faculty of Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ. / Dept. of Orthop. Surg., Science of Functional Recovery and Reconstruction, Okayama Univ. Graduate School of Medicine, Dentistry and Pharmaceutical Sciences　Masanori Yorimitsu

1-1-PD1-2　The strategy for posterolateral fragments associated with tibial plateau fractures Schatzker Type4 equivalent ····· S128

The Orthop. Trauma Center, Shonan Kamakura General Hosp.　Kentaro Futamura

1-1-PD1-3　How do I address Posterolateral plateau using Modified Anterolateral approach? ····· S129

Dept. of Orthop. Surg., Korea Univ. Guro Hosp., Seoul, Korea　Jong Keon Oh

1-1-PD1-4　How should the appropriate approach to the posterolateral fragments in tibia plateau fractures be chosen? ····· S130

Dept. of Orthop. Surg., Fukushima Medical Univ. School of Medicine / Dept. of Traumatology and Reconstructive Surg., Fukushima Medical Univ. School of Medicine　Shunsuke Sato

Symposium1　Optimal approach and fixation methods for Pilon fractures

(10：45〜12：10)

Chairs: T. Noda
K. Matsui
Commentator: Sean E. Nork

1-1-SY1-1　Knacks & pitfalls of the bone and soft tissue reconstruction in pilon fractures ····· S34

Shinyurigaoka Trauma Reconstruction Center / Dept. of trauma, Fukushima Medical Univ.　Toshiya Kudo

1-1-SY1-2　Operative Treatment of Pilon Fracture via Anterolateral Approach featuring “Kesagake Approach” ····· S35

Dept. of Orthop. Surg., Kaisei Hosp., Kagawa, Japan　Kiyoto Kinugasa

1-1-SY1-3　Extensile approach for pilon fractures ····· S36

The Orthop. Trauma Center, Shonan Kamakura General Hosp.　Kentaro Futamura

1-1-SY1-4　Posterior approaches and fixation for Pilon's fracture -Applications and limitations of the posterolateral and posteromedial approaches ····· S37

Dept. of Emergency and Critical Care Medicine, Nara Medical Univ.　Kenichi Nakano

Noontime Lecture 1
(12：25～13：25) Chair: H. Minagawa

1-1-NL1-1 It's not too late from now on Ultrasonography for trauma ····· S551
Dept. of Orthop., Yokohama City Univ. Hosp., Yokohama, Japan Kazuma Miyatake

Invited Lecture2
(13：40～14：40) Chair: H. Yajima

1-1-IL2-1 Scapula Fractures ····· S6
Regions Hosp. / Univ. of Minnesota Peter A. Cole

Symposium2 Treatment Guidelines for Combined Shoulder and scapula injuries
(14：50～16：10) Chairs: Y. Nakagawa
Y. Nagai
Commentator: Peter A. Cole

1-1-SY2-1 Shoulder Girdle Complex Injury Article Review ····· S42
Dept. of Orthop. Surg., Okayama City Hosp. Yo Kinami

1-1-SY2-2 Classification of combined shoulder girdle injuries and indications for surgery ····· S43
Advanced Critical Care and Emergency Center, Yokohama City Univ. Medical Center, Kanagawa, Japan.
Masahiro Matsumoto

1-1-SY2-3 Surgical procedure for Scapula Fracture ····· S44
Dept. of Orthop. Surg., Osaka City General Hosp. Yosuke Nagai

1-1-SY2-4 Treatment of scapular nonunion ····· S45
Ryokusenkai Yonemori Hosp. Orthop. Dept. Yoshinori Ueno

Invited Lecture3
(16：25～17：25) Chair: M. Shirahama

1-1-IL3-1 Tactics for induced membrane technique/
Induced membrane technique: tips and tricks ····· S7
Paris Sorbonne Univ. Alain Charles Masquelet

Day1・Room 2（6F Communication Hall）

Conference Award Lectures

（8：10～9：10）

Chairs: H. Ikegami
H. Inoue
Judges: A. Mogami
Y. Watanabe

1-2-AW-1 Objective Load Capacity Determination for Patients with the Femur Diaphysis Comminuted Fractures -Patient-Specific Finite Element Analysis- ……S25
Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ. Yusuke Matsuura

1-2-AW-2 Anatomical relation between S2 transiliac-transsacral screws entrance points and superior gluteal artery in fragility fracture of the pelvis ……S25
Dept. of Orthop. Surg., Kobe City Medical Center General Hosp. Shinnosuke Yamashita

1-2-AW-3 Risk factor assessment of delayed union and nonunion after intramedullary nailing for subtrochanteric femoral fractures ……S26
Dept. of Orthop. Surg., Hyogo Prefectural Kakogawa Medical Center, Kakogawa, Japan
Toshiki Kitamura

1-2-AW-4 Development and modification of a CT-based finite element analysis model for verifying the effect of shock-absorbing floors on hip fracture prevention …S26
Dept. of Orthop. and Trauma Research, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ., Tokyo, Japan Yoto Oh

1-2-AW-5 Factors of bone union prolongation for atypical femoral fractures examined including pathological findings ……S27
Dept. of Orthop. Surg., Komaki Hosp., Miyazaki, Japan Wataru Komaki

1-2-AW-6 Femoral canal isthmus is more proximal than extreme point of bowing in femurs with greater anteversion of femoral neck……S27
Dept. of Orthop. Surg., Enshu Hosp., Shizuoka, Japan Yuki Murakami

Combined Session of the Japanese Society of Orthopedic Ultrasound (JASOU) and the JSFR
Tomorrow's practice will change! - Recommendations for ultrasound practice in trauma

(9：25～10：55)

Chairs: M. Hirata
Y. Watanabe

1-2-OU-1 Let's try ultrasound examination for shoulder trauma ····· S513
Sagamihara Kyodo Hosp. Shinya Tsujiku

1-2-OU-2 Recommendations for ultrasound examination of pediatric fractures and dislocations around the elbow ····· S514
Trauma and Reconstruction Center, Teikyo Univ. School of Medicine, Tokyo, Japan / Dept. of Orthop. Surg., Teikyo Univ. School of Medicine, Tokyo, Japan Tomoo Nakagawa

1-2-OU-3 How I use ultrasound for distal radius fractures ····· S515
JCHO Tokyo Takanawa Hosp. Takahiro Kashiyama

1-2-OU-4 Recommendations of clinical application of musculoskeletal ultrasound for proximal femur fractures ····· S516
Niigata Rousai Hosp. / Niigata Central Hosp. Yohei Sakai

1-2-OU-5 Recommendations for sonography of fractures and dislocations around the ankle ····· S517
Dept. of Orthop. Saiseikai Nara Hosp. Yoshiyuki Kamatani

1-2-OU-6 Ultrasound-guided Exercise Therapy for Postoperative Contracture of Fracture around the Knee ····· S518
Dept. of Rehabilitation, Sagamiharakyodo Hosp. Toru Miyata

Presentations related to Symposium 4　Cancer patients・Femoral metastasis
(11：10～12：10)　　Chair: H. Ueda

1-2-SR4-1　Mortality after fracture injury in patients with malignant tumor ……S65
Dept. of Orthop. Surg., Yamagata Prefectural Central Hosp., Yamagata, Japan　Yasushi Naganuma

1-2-SR4-2　Problems of the fracture treatment in patients with malignant tumor ……S65
Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine, Kyoto, Japan　Naoyuki Horie

1-2-SR4-3　Outcome of femur metastases based on prognosis prediction of Katagiri score ……S66
Dept. of Orthop. Surg., The Jikei Univ. Kashiwa Hosp., Kashiwa, Chiba　Naoya Inagaki

1-2-SR4-4　Surgical experience of metastatic femur tumor and Cancer Board……S66
Dept. of Orthop. Surg., The Jikei Univ. School of Medicine, Tokyo, Japan　Nobuyuki Komukai

1-2-SR4-5　The relationship between surgical method and survival period for femoral metastatic bone tumors……S67
Dept. of Orthop. Surg., Japanese Red Cross Kyoto Daiichi Hosp., Kyoto, Japan　Hideki Ueda

1-2-SR4-6　Outcome of treatment of pathological fracture of the proximal femur due to bone metastasis using tumor prosthesis ……S67
Dept. of Orthop. Surg., Univ. of Miyazaki, Miyazaki, Japan　Masaru Hiyoshi

1-2-SR4-7　Indication of radiation therapy after intramedullary nailing for femoral shaft pathological/impending fracture ……S68
Dept. of Orthop. and Spinal Surg., Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ., Tokyo, Japan　Takumi Kaku

Noontime Lecture 2
(12：25～13：25)　　Chair: S. Obara

1-2-NL2-1　Ender nailing ……S552
Kamitsuga General Hosp.　Satoshi Takahata

Challenging Case Session1　Tibial Plateau Fractures

(13：40～14：40)　　Chair: T. Noda

1-2-CC1-1　C3.3 tibial plateau fracture treatment strategies including multiple buttressing, metaphyseal reconstruction …… S183
Trauma Center, Shonan Kamakura General Hosp.　Masayuki Hasegawa

1-2-CC1-2　A case of combined proximal and diaphyseal tibial fracture …… S184
Dept. of Emergency and Critical Care Medicine, Nara Medical Univ., Nara, Japan / Trauma Reconstruction Center, Shin-yurigaoka General Hosp.　Hironobu Konishi

1-2-CC1-3　Treatment strategy for tibial plateau fracture extending to the diaphysis in our hospital …… S185
Trauma Center, Nagasaki Univ. Hosp.　Shingo Ota

Challenging Case Session2　Pilon Fractures

(14：50～15：50)　　Chair: K. Futamura

1-2-CC2-1　Challenging Case: Pilon fractures with impacted anterolateral articular surface …… S187
Trauma and Reconstruction Center, Teikyo Univ. School of Medicine, Tokyo, Japan / Dept. of Orthop. Surg., Teikyo Univ. School of Medicine, Tokyo, Japan　Tomoo Nakagawa

1-2-CC2-2　A case of post-traumatic osteoarthritis after pilon fracture …… S188
Dept. of Emergency Healthcare and Disaster Medicine, Faculty of Medicine, Dentistry and Pharmaceutical Sciences, Okayama Univ.　Takenori Uehara

1-2-CC2-3　A case of pediatric pilon fracture with tibiofibular diaphyseal and ankle fracture …… S189
Emergency and Critical Care, Kyushu Univ. Hosp., Fukuoka, Japan　Kenta Momii

Presentations related to Panel Discussion 1　Tibial plateau fractures
(16：00～16：40)　　Chair: T. Asahara

1-2-PR1-1　Experiment with Modified Frosch approach for posterolateral tibial plateau fracture …… S131
Dept. of Orthop. Surg., Takachiho National Health Hosp., Miyazaki, Japan　Toshiki Kamiya

1-2-PR1-2　Treatment of tibial plateau fractures with depression fragments by Malleable Bone Tamp …… S131
Kochi Health Sciences Center　Toshiyuki Matsumoto

1-2-PR1-3　Tibial plateau fractures with posterolateral bone fragments ~ Usefulness and limitations of the medial head of the gastrocnemius detaching approach~ …… S132
Trauma Reconstruction Center, Shinyurigaoka General Hosp. / Dept. of Orthop. Surg., Nara Medical Univ., Nara, Japan　Hironobu Konishi

1-2-PR1-4　Two cases of proximal tibia fracture with posterolateral fragment: Rduction from posterior, fixation from lateral …… S132
Sapporo Higasi Tokushukai Hosp., Sapporo, Japan　Kazuo Sato

1-2-PR1-5　Two cases of two-stage surgery for tibial plateau fractures with supine Burks approach …… S133
Dept. of Orthop. Surg., Kyoto Kizugawa Hosp., Kyoto, Japan　Tomohito Ito

Presentations related to Symposium 1　Pilon fractures, etc.
(16：50～17：30)　　Chair: S. Harada

1-2-SR1-1　Minimally invasive surgical treatment of pilon fractures ……S38
Dept. of Traumatology, Fukushima Medical Univ. / Trauma & Reconstruction Center, Southern TOHOKU General Hosp.　Takuya Yuki

1-2-SR1-2　Experience in treating Pilon fracture operated on posterior medial approach ……S38
Trauma Center, Nagasaki Univ. Hosp.　Shingo Ota

1-2-SR1-3　3 cases report: new approach of Pilon fracture ……S39
Juntendo Univ. Shizuoka Hosp.　Tomoya Kojo

1-2-SR1-4　Outcome of the surgical treatment for Pilon fracture with Ilizarov external fixator ……S39
Dept. of Orthop. Surg., Chikamori Hosp., Kochi, Japan　Yukinobu Nishii

1-2-SR1-5　Lower extremity fractures treatment of circular external fixator in elderly patients with hemorrhagic blisters ……S40
Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine, Akita, Japan　Koji Nozaka

Day1・Room 3（6F Exhibition Gallery）

Symposium3　Strategies for Femoral Periprosthetic & Interprosthetic Fractures

（8：00～9：25）　Chairs: T. Baba, Y. Ueda

1-3-SY3-1　Investigation of periprosthtic fractures, Vancouver type B1 similar to atypical femoral fractures（Study of case series and finite element method）……S50
Dept. of Orthop. Surg., Oyumino Central Hosp.　Takayuki Nakajima

1-3-SY3-2　Surgical Treatment of Periprosthetic Femoral Fractures with unstable femoral component - Tips and Pitfalls of Revision with Cementless Stem ……S51
Dept. of Orthop. Surg., Juntendo Shizuoka Hosp.　Akio Kanda

1-3-SY3-3　Cemented revision total hip arthroplasty for periprosthetic femoral fracture ……S52
Dept. of Orthop. Surg., Kansai Medical Univ.　Kenichi Oe

1-3-SY3-4　Principles of osteosynthesis and plate length selection in inter prosthetic femoral fractures……S53
Sapporo Higashi Tokushukai Hosp., Orthop. Trauma Center, Hokkaido, Japan　Yuta Izawa

1-3-SY3-5　Peri-TKA Fractures（Proper use of plates and intramedullary nails）……S54
Dept. of Orthop. Surg., Saiseikaikumamoto Hosp., Kumamoto, Japan　Yoshihisa Anraku

Panel Discussion2　Prosthetic Replacement for Displaced Femoral Neck Fracture - What is the Best Way?

（9：35～11：00）　Chairs: N. Takahira, I. Morohashi

1-3-PD2-1　Cemented hemiarthroplasty through CPP approach for displaced femoral neck fractures in elderly patients …… S135
Dept. of Joint Replacement Surg., Kouseiren Takaoka Hosp., Takaoka, Japan　Daigo Sakagoshi

1-3-PD2-2　-What is joint replacement using the Superior Approach for Femoral neck fractures?- …… S136
Joint Surg. Clinic and Artificial Joint Center, Dept. of Orthop., Yodogawa Christian Hosp.　Tomoaki Suzuka

1-3-PD2-3　Factors associated with early acquisition of walking ability in femoral head replacement by antero-lateral supine approach …… S137
Dept. of Orthop. Surg., Jyuzen Memorial Hosp.　Hiroshi Koyama

1-3-PD2-4　Best treatment of femoral neck fracture is total hip arthroplasty with dual mobility cup in anterior approach …… S138
Dept. of Orthop. Surg., Saiseikai Yokohamashi Tobu Hosp.　Atsushi Funayama

1-3-PD2-5　Displaced femoral neck fracture Our best practice in 2023: Direct anterior approach・Dual Mobility Cup・Cement stem THA …… S139
Dept. of Orthop., Faculty of Medicine, Juntendo Univ., Tokyo, Japan　Yasuhiro Homma

Presentations related to Symposium 3　Periprosthetic fractures of the femur
(11：05～12：10)　　Chair: H. Kumagai

1-3-SR3-1　The effective position of the locking attachment plate for the treatment of periprosthetic femoral fractures ……S55
Dept. of Orthop. Surg., Juntendo Univ. School of Medicine　Koju Hayashi

1-3-SR3-2　Two cases of Atypical Femoral Fracture-like periprosthetic fractures with bone healing achieved by double plating……S55
Dept. of Orthop., Graduate School of Medical Science, Kyoto Prefectural Univ. of Medicine　Ryota Cha

1-3-SR3-3　Usefulness of revision surgery with cemented stem for periprosthetic femoral stem fracture ……S56
Dept. of Orthop. Surg., Sano Memorial Hosp.　Suguru Nakamura

1-3-SR3-4　Outcome of periprosthetic fracture of the femur at our hospital……S56
Dept. of Orthop., Tokyo Dental College Ichikawa General Hosp.　Ryo Matsumoto

1-3-SR3-5　Periprosthetic fracture with two-stage surgery using intramedullary nail …S57
Orthop., Chiba Univ.　Yuriko Yoshimoto

1-3-SR3-6　Two cases of peri-implant subtrochanteric fractures under sliding hip screws treated with a new intramedurally nail ……S57
Dept. of Orthop. Surg., Onomichi Municipal Hosp.　Yukimasa Okada

1-3-SR3-7　Investigation of the number of plates for osteosynthese for Vancouver Classification B1, B2 and Baba Classification type2 using finite element analysis ……S58
Dept. Orthop. Surg., Oyumino Central Hosp.　Takayuki Nakajima

1-3-SR3-8　A study of treatment result about classification type B of periprosthetic femoral fracture Vancouver ……S58
Izumi City General Hosp. / Dept. of Orthop. Surg., Osaka Metropolitan Univ., Graduate School of Medicine　Naoya Kubota

Noontime Lecture 3
(12：25～13：25)　　Chair: T. Maehara

1-3-NL3-1　Treatment Strategies for Periprosthetic Femoral Fractures: Cable Cerclage Techniques and Indications……S553
Oyumino Central Hosp.　Takayuki Nakajima

1-3-NL3-2　Therapeutic strategy for the periprosthetic femoral fracture using cable and plate ……S554
Dept. of Medicine for Orthop. and Motor Organ, Graduate School of Medicine / Dept. of Orthop., Faculty of Medicine, Juntendo Univ.　Tomonori Baba

Invited Lecture4
(13：40～14：40) Chair: K. Kaneko

1-3-IL4-1 RSA for Proximal Humeral Fractures: Past, Present, and Future in France ····· S8
Clinic Paris Lilas Kishi Takaakira

Panel Discussion3 RSA for Proximal Humerus Fracture - Selections
(14：50～16：20) Chairs: H. Ikegami
K. Kikugawa

1-3-PD3-1 The indication and implant selection of RSA for proximal humeral fracture ····· S146
Dept. of Orthop. Surg., National Hosp. Organization Takasaki General Medical Center /
Dept. of Orthop. Surg., Gunma Univ., Graduate School of Medicine Tsuyoshi Ichinose

1-3-PD3-2 Clinical outcomes and pitfalls of AEQUALIS™ REVERSED FX ····· S147
Dept. of Orthop., Jichi Medical Univ. Hideyuki Sasanuma

1-3-PD3-3 Indications and Surgical Outcomes of Lima SMR Reverse for Proximal Humeral Fracture····· S148
Dept. of Orthop. Surg., Tokai Univ. Hachioji Hosp. Yoshiyasu Uchiyama

1-3-PD3-4 For those who are concerned about postoperative the external rotation function ... "Arrow" (MDM) ····· S149
Dept. Orthop. Surg. Juntendo Shizuoka Hosp. Shuichi Moriya

1-3-PD3-5 Reverse shoulder arthroplasty using Equinoxe Fracture System for the treatment of proximal humeral fracture ····· S150
Dept. of Orthop. Surg., Keio Univ. School of Medicine Noboru Matsumura

Presentations related to Symposium 9　Spinal injury

(16：30～17：05)　　Chair: K. Ishii

1-3-SR9-1　Trial of very early decompression surgery for cervical spinal cord injury without radiographic evidence of trauma …… S108

Dept. of Orthop. Surg., Yamanashi Prefectural Central Hosp.　Hiroaki Iwase

1-3-SR9-2　Multidisciplinary intervention for cervical spinal cord injury …… S108

Tsukuba Medical Center Hosp.　Shota Nakagawa

1-3-SR9-3　Are markers of liver function useful in predicting subacute neurological functional improvement on severe spinal cord injury? …… S109

Trauma and Reconstruction Center, Teikyo Univ. Hosp. / Dept. of Orthop. Surg., Teikyo Univ. School of Medicine　Tatsuhisa Takekawa

1-3-SR9-4　Outcome of Very Early Surgery for Non-Osteoarthritic Cervical Spinal Cord Injury …… S109

Advanced Critical Care and Emergency Center, Yokohama City Univ. Medical Center, Kanagawa, Japan　Masahiro Matsumoto

Panel Discussion4　Current Treatment Strategies for Distal Radius Fractures with AO Classification Type C3

（8：00～9：25）　Chairs: Y. Zenke, K. Naito

1-4-PD4-1　The strategies for AO/OTA classification C3 type distal radius fractures　S156
Showa Univ. Yokohama Northern Hosp., Orthop.　Keikichi Kawasaki

1-4-PD4-2　Treatment strategy for C3 distal radius fracture from arthroscopic perspective ····· S157
Dept. of Orthop. Surg., Saiseikai Shimonoseki General Hosp.　Yukio Abe

1-4-PD4-3　Treatment of intra-articular comminuted fractures of the distal radius performed with Initial R Xpert 2.4 rim plate alone ····· S158
Trauma Reconstruction Center, Juntendo Univ. Urayasu Hosp. / Dept. of Orthop., Juntendo Univ. Urayasu Hosp.　Satoshi Ichihara

1-4-PD4-4　Treatment strategy for hardly curable type C3 distal radius fractures ··· S159
Niigata Hand Surg. Foundation　Koji Moriya

1-4-PD4-5　Treatment strategies of AO type 3 distal radius fractures with hybrid type volar locking plate systems ····· S160
Dept. of Orthop. Surg., Dokkyo Medical Univ. Nikko Medical Center　Denju Osada

Symposium4　Treatment of Fracture in Cancer Patients

（9：35～11：00）　Chair: T. Takagi

1-4-SY4-1　Management of the locomotor system in cancer patients - Onco-Orthopaedics - ····· S60
Dept. of Orthop. Surg., National Hosp. Organization Tokyo Medical Center　Hideo Morioka

1-4-SY4-2　Surgical outcome of proximal femoral fractures in patients undergoing cancer treatment, excluding bone metastases ····· S61
Orthop., Juntendo Univ., Tokyo, Japan　Juri Teramoto

1-4-SY4-3　Potential risk of atypical femoral fractures in bone metastasis patients using bone modifying agents ····· S62
Dept. of Orthop. and Trauma Research, Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental Univ., Tokyo, Japan　Yoto Oh

1-4-SY4-4　Intervention of orthopaedic surgeon improves activities of daily living in patients with cancer/bone mestasis ····· S63
Dept. of Orthop. Surg. and Joint Reconstruction Center, Chibanishi General Hosp. Chiba, Japan　Fumiaki Masui

1-4-SY4-5　How to utilize prosthetic reconstruction and cement augmentation for pathological fractures in the extremity end pelvis ····· S64
Dept. of Orthop. Surg., Teikyo Univ. School of Medicine　Jungo Imanishi

Presentations related to Panel Discussion 4　Distal radius fractures（C3）
（11：20～12：10）　　Chair: K. Morita

1-4-PR4-1　The research of the dorsal split-depression fracture of distal radius …… S161
Dept. of Orthop. Surg. Kousei General Hosp.　Kyohei Chiba

1-4-PR4-2　Treatment strategy for AO/OTA type C3 distal radius fractures and consideration of poor outcome factors …… S161
Dept. of Orthop. Surg., Higashisumiyoshi Morimoto Hosp., Osaka, Japan　Hidetoshi Teraura

1-4-PR4-3　Indication and limitation of fluoroscopic reduction for type C-3 distal radius fractures -Arthroscopic evaluation of intraarticular joint displacements using a bendable polyaxial locking plate- …… S162
Dept. of Orthop. Surg., Yao Tokushukai General Hosp.　Yoshihiro Dohi

1-4-PR4-4　Is K-I classification useful for distal radius fractures with a volar lunate facet fragment? …… S162
Dept. of Orthop. Surg., Okayama Saiseikai General Hosp.　Shunji Okita

1-4-PR4-5　Volar radioulnar ligament suture technique for distal radius fractures with volar lunate facet fragments …… S163
Hand and Elbow Surg. Center, Dept. of Orthop. Surg., Kawasaki Municipal Kawasaki Hosp.
Masao Nishiwaki

1-4-PR4-6　Coverage of DVR Crosslock Volar Rim Plate for Distal Radial Volar Lunate Facet Fragment …… S163
Fukuoka Orthop. Hosp., Fukuoka, Japan　Masahiro Matsuda

Noontime Lecture 4
（12：25～13：25）　　Chair: K. Kinugasa

1-4-NL4-1　'Helios locking pin sleeve system' invented for Himawari method for comminuted patellar fractures …… S555
Harima Himeji General Medical Center　Akihiro Maruo

Presentations related to Panel Discussion 3　RSA for proximal humerus fractures

(13：40～14：45)　　Chair: M. Yamada

1-4-PR3-1　Clinical results of reverse shoulder arthroplasty for the 4part proximal humeral fractures in elderly patients …… S151

Dept. of Orthop. Surg., Yokohama Municipal Citizen's Hosp.　Akihiro Nakazawa

1-4-PR3-2　Impact of age on outcome after reverse shoulder arthroplasty performed for proximal humerus fractures …… S151

Dept. of Orthop. Surg., Iwaki City Medical Center, Fukusima, Japan　Gaku Matsuzawa

1-4-PR3-3　Clinical experience of Riverse Shoulder Arthroplasty with bone graft for proximal humeral fractures …… S152

Orthop. Dept., Yashio Central Hosp., Saitama, Tokyo　Hideaki Asai

1-4-PR3-4　Reverse Shoulder Arthroplasty to proximal humeral fracture with deltoid injury …… S152

Dept. of Orthop. Surg., Tokai Univ. School of Medicine　Takeshi Imai

1-4-PR3-5　Outcome of Reverse Shoulder Arthroplasty for Proximal humeral Fracture over 80 years old …… S153

Dept. of Orthop. Surg., Yashima General Hosp.　Hironori Manabe

1-4-PR3-6　Treatment of Proximal Humerus Fractures in the Elderly using Aequalis FX …… S153

Dept. of Orthop. Surg., Japanese Red Cross Kyoto Daini Hosp.　Takashi Kiba

1-4-PR3-7　Shoulder Arthroplasty for Proximal Humeral Fracture Sequelae: A Case Study …… S154

Dept. of Orthop. Surg., Keio Univ. School of Medicine　Ryosuke Tsujisaka

1-4-PR3-8　Comparison of clinical result between reverse shouder arthroplasty for proximal humerus fracture and fracture sequelae and salvage reverse shoulder arthroplasty for failed operative treatment of proximal humeral fracture　S154

Ishikiriseiki Hosp.　Yoshihiro Hirakawa

Symposium5　Latest Strategy for Syndesmosis Injury

(14：50～16：20)　　**Chairs: N. Haraguchi**
N. Takada

1-4-SY5-1　Treatment Strategies for Syndesmosis Injury ……S70
Dept. of Orthop. Surg., Teikyo Univ. / Trauma and Reconstruction Center, Teikyo Univ. Hosp.
Kentaro Matsui

1-4-SY5-2　Cotton test for AO classification 44C1/C2 may avoid unwanted Syndesmosis fixation ……S71
Orthop. Trauma Center Shonan Kamakura General Hosp.　Takashi Ogawa

1-4-SY5-3　Strategy for the syndesmotic injury ……S72
Okayama Rosai Hosp.　Akihiro Kanamaru

1-4-SY5-4　Diagnosis and treatment of syndesmosis injuries based on cadaveric research ……S73
Dept. of Orthop. Surg., Sapporo Medical Univ. School of Medicine　Atsushi Teramoto

1-4-SY5-5　Is the interosseous ligament the key? A consideration from syndesmosis injuries in patients with malleolar fracture or ligamentous syndesmosis injury ……S74
Foot and Ankle Surg., Seirei Hamamatsu Hosp.　Masanori Taki

Presentations related to Symposium 2　Combined shoulder girdle injury

(16：30～17：10)　　**Chair: A. Nakazawa**

1-4-SR2-1　Clinical findings and treatment outcomes in cases of combined shoulder girdle injuries ……S46
Advanced Critical Care and Emergency Center, Yokohama City Univ. Medical Center, Kanagawa, Japan　Masahiro Matsumoto

1-4-SR2-2　Triple injury of the superior shoulder suspensory complex ……S46
Dept. of Orthop. Surg., Chugoku Rosai Hosp., Hiroshima, Japan　Yoshihiro Nakamura

1-4-SR2-3　Internal rotation and medial displacement of the scapular neck in the floating shoulder should be improved ……S47
Hyogo Emergency Medical Center, Dept. of Orthop. Surg., Kobe, Japan　Keitaro Tada

1-4-SR2-4　Survey of scapular body fractures which should be diagnosed with floating shoulder ……S47
Dept. of Emergency and Critical Care, Saitama Medical Univ. International Medical Center
Shintaro Kato

1-4-SR2-5　Clinical outcomes of operative treatment in scapular body and neck fracture ……S48
Dept. of Emergency and Critical Care Medicine, Saitama Medical Center　Yusuke Maezumi

Day1・Room 5（10F 1001-2）

Main Theme1　Clavicle fractures

（8：00～8：50）　　Chair: Y. Kusabiraki

1-5-MT1-1　Bridgeplate fixation without skipped incision for clavicle fractures with intermediate fragments…… S195
Yokohama Rosai Hosp., Kanagawa, Japan　Masaya Murao

1-5-MT1-2　Minimally invasive plate osteosynthesis for clavicle midhaft fractures…… S195
Okayama Rosai Hosp.　Akihiro Kanamaru

1-5-MT1-3　The verification of a case of implant removal after MIPO fixation for diaphyseal clavicle fracture …… S196
Sapporo Higashi Tokusyhukai Hosp.　Tetsuya Shirakawa

1-5-MT1-4　Usefulness of anterior plate fixation with reduction plate for clavicle shaft multi fragmentary fracture…… S196
National Nagasaki Medical Center　Yosuke Oba

1-5-MT1-5　Outcome of plate fixation for clavicle diaphysis fractures at our hospital… S197
Seirei Hamamatsu General Hosp., Orthop.　Yusuke Tojo

1-5-MT1-6　Treatment results of intramedullary pinning for clavicular diaphyseal fractures Robinson2B1 …… S197
Kinu Ishikai Hosp.　Sho Terajima

1-5-MT1-7　Experience in treatment of VA-LCP Clavicle Plate 2.7（DePuy Synthes）for clavicle fracture …… S198
Prefectural Nobeoka Hosp.　Motoki Fukunaga

1-5-MT1-8　Compatibility of the VA-LCP Clavicle Plate for Clavicle …… S198
Dept. of Orthop. Surg., Sakai City Hosp., Osaka, Japan　Koki Hosozawa

Main Theme2　Dislocations of the acromioclavicular joint・Distal clavicle fractures

(9：00～9：40)　　Chair: T. Mondori

1-5-MT2-1　Reconstruction of the coracoclavicular ligament using the dog bone button …… S199

Tokuyama Central Hosp.　Atsushi Moriya

1-5-MT2-2　Rate of redislocation after acromioclavicular joint dislocation: reconstruction of the acromioclavicular and coracoclavicular ligaments …… S199

Traumatology and Reconstructive Surg. Center, Aizu Chuo Hosp., Fukushima, Japan / Dept. of Traumatology and Reconstructive Surg., Fukushima Madical Univ., Fukushima, Japan　Chiharu Nagashima

1-5-MT2-3　Treatment outcomes of distal clavicle locking plate for distal clavicle fracture …… S200

Saiseikai Shimonoseki General Hosp. Orthop. Surg.　Yohei Takahashi

1-5-MT2-4　Effect of temporary acromioclavicular arthrodesis in combination with CW plate for distal clavicle fractures containing comminuted distal small bone fragments …… S200

Kyoto Tanabe Central Hosp., Kyoto, Japan / Akashi City Hosp., Hyogo, Japan　Taisuke Kunitomo

1-5-MT2-5　Operative results of distal clavicular fractures using SCORPION NEO … S201

Koto Hosp.　Hirotomo Kuwahara

1-5-MT2-6　Effect of suture anchor for unstable distal clavicle fractures …… S201

Dept. of Orthop. Surg., Surgical Science, Tokai Univ. School of Medicine　Naoki Takatori

Main Theme3　Distal radius fractures

(9：50～10：30)　　Chair: H. Kato

1-5-MT3-1　Lisk factor of subluxation after volar plating of volar displaced distal radius fractures …… S202

Orthop. Trauma Center, Hyogo Prefectural Nishinomiya Hosp., Hyogo, Japan　Hitoshi Hirase

1-5-MT3-2　Importance of volar tilt reduction in volar displaced distal radius fractures with volar lunate facet fragments …… S202

Dept. of Orthop., Juntendo Univ. Faculty of Medicine, Tokyo, Japan /
Dept. of Orthop. Surg., Hakuhoukai Oji Hosp., Tokyo, Japan　Hiroyuki Obata

1-5-MT3-3　Clinical Results of Surgical Treatment for Distal Radius Fractures with Additional Fractures in the Volar Lunate Facet Fragment …… S203

Dept. of Orthop. Surg., Dokkyo Medical Univ.　Kentaro Nakayama

1-5-MT3-4　Treatment outcome with additional dorsal fixation of dorsal lunate facet fragment in distal radius fracture …… S203

Dept. of Orthop. Surg., Shiraniwa Hosp., Nara, Japan　Kosuke Sasaki

1-5-MT3-5　Results of treatment in patients with marginal volar rim fracture of distal radius using two types of HTS Stellar plates…… S204

Dept. of Orthop., Showa Univ. Northern Yokohama Hosp., Kanagawa, Japan /
Dept. of Orthop., Kikuna Memorial Hosp., Kanagawa, Japan　Hirotaka Akezuma

1-5-MT3-6　Clinical results after the surgery of distal radius fracture using Initial R Xpert2.4 …… S204

Hand Surg. and Trauma Reconstruction Center, Dept. of Orthop. Surg., Juntendo Univ. Urayasu Hosp.
Satoshi Otani

Main Theme4　Humeral shaft fractures・Distal humerus fractures

(10：40～11：10)　　Chair: H. Tsuji

1-5-MT4-1　Results of retrograde use of PHILOS Long Plate for distal shaft fracture of humerus …… S205

Dept. of Orthop. Surg., Kansai Medical Univ. Hosp. Emergency Medical Center, Osaka, Japan / Dept. of Orthop. Surg., Kansai Medical Univ. Hosp., Osaka, Japan　Kunihiro Suzuki

1-5-MT4-2　Outcome of posterior lateral plate fixation for distal humerus diaphyseal fractures …… S205

Dept. of Critical Care Medicine and Trauma, National Disaster Medical Center　Tsuyoshi Hishikawa

1-5-MT4-3　The tip of Surgery for Distal Humerus Shaft Fracture …… S206

Dept. of Orthop. Surg., Higashi Totsuka Memorial Hosp.　Tomoyuki Matsuoka

1-5-MT4-4　Reproducibility evaluation of 3D preoperative planning for distal humeral fracture …… S206

Dept. of Orthop. Surg., Tokyo Medical Univ. Ibaraki Medical Center　Yuichi Yoshii

1-5-MT4-5　Clinical significance of three-Dimensional Evaluations of Preoperative Planning Reproducibility for the Osteosynthesis of Distal Humerus Fractures: comparison with traditional method …… S207

Dept. of Orthop. Surg., Univ. of Tsukuba Hosp., Ibaraki, Japan / Dept. of Orthop. Surg., Mito Kyodo General Hosp.　Sho Iwabuchi

Main Theme5　Primary TEA for distal humerus fractures

(11：20～11：45)　　Chair: K. Ikeda

1-5-MT5-1　The outcome of linked total elbow arthroplasty for distal humeral fractures …… S207

Gifu Prefectural General Medical Center　Hiroyuki Tanahashi

1-5-MT5-2　Indication of total elbow arthroplasty with fresh intra-articular fracture　S208

Trauma and Reconstruction Center, Shinyurigaoka General Hosp.　Hiroshi Takamure

1-5-MT5-3　Outcome of Radial Head Replacement in Elbow Dislocation Fracture …… S208

Orthop. Dept., Ryokusenkai Yonemori Hosp.　Yoshinori Ueno

1-5-MT5-4　Clinical results of radial head replacement for radial head fractures …… S209

Niigata Hand Surg. Foundation　Koji Moriya

Noontime Lecture 5

(12：25～13：25)　　Chair: Y. Anraku

1-5-NL5-1　Periprosthetic Fractures - treatment options and outcomes …… S556

Department of Orthopaedics, University J.E. Purkinje, Masaryk Hospital, Usti nad Labem, Czech Republic / Department of Orthopaedic Surgery, Faculty of Medicine in Hradec Kralove, Charles University in Prague, Hradec Kralove, Czech Republic / Institute of Physiology of the Czech Academy of Sciences, Prague, Czech　Tomas Novotny

Main Theme6　Ankle fractures

(13：40～14：10)　　Chair: T. Teramoto

1-5-MT6-1　The talar-tilt angle under valgus stress may be a useful diagnostic tool for detecting triangular ligament injury in simple lateral malleolar fracture… S209

Dept. of Orthop. Surg., Univ. of Teikyo, Tokyo, Japan / Trauma and Reconstruction Center, Teikyo Univ. Hosp.　Kentaro Matsui

1-5-MT6-2　Outcomes of medial deltoid ligament tears without repair in ankle fractures without medial malleolar fractures …… S210

Dept. of Orthop. Surg., Kyushu Rosai Hosp., Fukuoka, Japan　Yasuhiro Omori

1-5-MT6-3　Surgical treatment for ankle fracture involving the posterior malleolus … S210

Dept. of Traumatology, Fukushima Medical Univ., Fukushima, Japan / Trauma & Reconstruction Center, Southern TOHOKU General Hosp.　Motoyuki Takaki

1-5-MT6-4　Surgical results of posterior malleolar fracture with open reduction and internal fixation using a posterior approach …… S211

Shikoku Medical Center for Children and Adults　Eiji Morikawa

1-5-MT6-5　Is there a safe pathway for percutaneous fixation of posterior malleolar fracture? …… S211

Trauma & Reconstruction Center, Teikyo Univ. Hosp. / Dept. of Orthop. Surg., Teikyo Univ. School of Medicine　Hirotaka Matsuura

Main Theme7　Peri-TKA and distal femur fractures

(14：20～14：50)　　Chair: M. Yamaguchi

1-5-MT7-1　Our experience of treatment with RFNA; Retrograde Femoral Nail Advanced …… S212

Dept. of Orthop. Surg., Seirei Mikatahara General Hosp., Shizuoka, Japan　Kaoru Harada

1-5-MT7-2　Experience and strategy of peri-TKA fractures with Su classification type 3 …… S212

Fukuoka Orthop. Hosp.　Kohei Ishihara

1-5-MT7-3　A case of open fracture around TKA requiring additional plate fixation after Ilizarov external fixation …… S213

Dept. of Orthop., Juntendo Univ. Urayasu Hosp., Chiba, Japan　Masatoshi Koh

1-5-MT7-4　Treatment outcome of early weight bearing on supracondylar femur fractures …… S213

Kamedadaiichi Hosp.　Shin Watanabe

1-5-MT7-5　Experience of early full weight bearing with large double plate fixation for elderly femoral supracondylar fracture …… S214

Dept. of Orthop. Surg., HITO Hosp.　Yasumitsu Ishimaru

Main Theme8　Lisfranc fracture-dislocations

(15：00～15：30)　　Chair: Y. Hara

1-5-MT8-1　Factors related surgical results of Lisfranc fracture dislocations …… S214
Dept. of Orthop. Surg., Syunjuukai Shiroyama Hosp.　Chuji Hirota

1-5-MT8-2　Open reduction and multiple pinning for treating Lisfranc fracture-dislocation …… S215
Dept. of Traumatology, Fukushima Medical Univ., Fukushima, Japan / Trauma & Reconstruction Center, Southern TOHOKU General Hosp.　Motoyuki Takaki

1-5-MT8-3　Loss of reduction after screw fixation for the Lisfranc joint injuries …… S215
Dept. of Orthop., Fukuyama City Hosp.　Tadahiro Hori

1-5-MT8-4　Factors relating to surgical results of Lisfranc fracture dislocations …… S216
Dept. of Orthop. Surg., Shunjyuukai Shiroyama Hosp.　Hozumi Kumano

Main Theme9　Intertrochanteric / Reverse Oblique fractures of the femur

(15：40～16：10)　　Chair: N. Katoh

1-5-MT9-1　Risk factors for failure of transverse pattern in intertrochanteric femoral fractures …… S216
Orthop. Trauma Center, Sapporo Higashi Tokushukai Hosp., Sapporo, Japan　Yuta Izawa

1-5-MT9-2　Withdrawn …… S217

1-5-MT9-3　Clinical results of intertrochanteric femoral fractures in our hospital …… S217
Dept. of Orthop. Surg., Saiseikai Senri Hosp.　Yoshinori Yasuhara

1-5-MT9-4　The research of the penetrated trochanteric fracture of femur …… S218
Dept. of Orthop. Surg., Kousei General Hosp.　Kyohei Chiba

1-5-MT9-5　Femoral head fragment control after osteosynthesis to basicervical fracture of the femur or trochanteric fracture with lateral wall fracture. TFNA cement augmentation versus CM nail …… S218
Dept. of Orthop., Fukuoka Shinmizumaki Hosp., Fukuoka, Japan　Satoru Okuma

Main Theme10　Prevention, epidemiology, and registration

(16：20～17：05)　　Chair: M. Uchino

1-5-MT10-1 OrthoEvidence Trial Assessing Japanese Knowledge Updates (OTAKU) : Trial of knowledge translation among Japanese surgeons …… S219
Teikyo Univ. Dept. of Orthop. / Japanese Society for Fracture Repair　Natsumi Saka

1-5-MT10-2 Barriers for Evidence-Based Medicine among Japanese orthopaedic surgeons: a cross-sectional survey …… S219
Teikyo Univ. Dept. of Orthop. / Japanese Society for Fracture Repair　Natsumi Saka

1-5-MT10-3 Epidemiology and reporting characteristics of systematic reviews in trauma field of orthopedic journals: A cross-sectional meta-epidemiological study　S220
Dept. of Orthop. Surg., Miyamoto Orthop. Hosp., Okayama, Japan　Norio Yamamoto

1-5-MT10-4 English publication rate abstracts in annual meeting of the Japanese society for fracture repair: A cross-sectional meta-epidemiological study …… S220
Dept. of Orthop. Surg., Miyamoto Orthop. Hosp., Okayama, Japan　Norio Yamamoto

1-5-MT10-5 Trend Analysis of Japanese Papers Related to Distal Radius Fracture in the Last 10 Years - Differences in Topics in JSFR and JSSH Journals …… S221
Trauma & Reconstructive Surg. Center, Univ. of Occupational and Environmental Health, Japan Hosp.　Yukichi Zenke

1-5-MT10-6 Below- or above-elbow fixation in conservative treatment of distal radius fractures: a systematic review and meta-analysis …… S221
Teikyo Univ. Dept. of Orthop.　Natsumi Saka

1-5-MT10-7 Implants Issues for the Future from the SDGs …… S222
Dept. of Orthop. Surg., Hiroshima Citizen Hosp., Hiroshima, Japan　Hiroaki Murakami

Day1・Room 6（11F Conference Hall "Winds"）

Implant Committee Report　Plate fixation for secure fracture healing -Do not use plates without knowing this-

(8：00～9：00)　　**Chairs: S. Iwabu, S. Isefuku**

1-6-IC-1　Basic principles of plate osteosynthesis …… S24
Dept. of Orthop. Surg., Okayamasaiseikai Hosp.　Takeshi Doi

1-6-IC-2　What is the plate fixation method that leads to bone union learned from plate failure? …… S24
Gifu Univ. Advanced Critical Care Center　Norihide Kanda

1-6-IC-3　Mechanical Evaluation of Plate and Fracture Site: Theoretical Armament through Finite Element Analysis …… S24
Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ.　Yusuke Matsuura

Main Theme11　Spinal injury

(9：10～9：50)　　**Chair: T. Fujiyoshi**

1-6-MT11-1　Investigation of treatment outcomes for thoracolumbar burst fracture … S222
Kimitsu Chuo Hosp., Chiba, Japan / Dept. of Orthop. Surg., Graduate School of Medicine, Chiba Univ., Chiba, Japan　Megumi Yazaki

1-6-MT11-2　Influence of the number of fixed vertebral bodies on postoperative vertebral alignment in thoracolumbar vertebral body fractures …… S223
Advanced Critical Care and Emergency Center, Yokohama City Univ. Medical Center, Kanagawa, Japan　Daisuke Enomoto

1-6-MT11-3　Attempt of a short intervertebral fixation, combining penetrating endplate screw and fenestrated screw for thoracolumbar fractures with DISH …… S223
Sanmu Medical Center　Akihiro Iida

1-6-MT11-4　Thoracolumbar fractures with DISH require a longer time for bone healing than those without DISH …… S224
Trauma and Reconstruction Center, Teikyo Univ. Hosp. / Dept. of Orthop. Surg., Teikyo Univ. School of Medicine　Tatsuhisa Takekawa

1-6-MT11-5　Treatment outcomes of spinal fractures in the thoracolumbar transition area based on the number of bone bridges …… S224
Dept. of Orthop. Surg., Murayama Medical Center, Tokyo, Japan　Mitsuru Furukawa

1-6-MT11-6　Percutaneous pedicle screw placements for upper and middle thoracic vertebral fractures using single dimensional fluoroscopy …… S225
Juntendo Univ. Urayasu Hosp., Chiba, Japan　Takatoshi Okuda

Main Theme12　Fracture Rehabilitation

(10：00～10：30)　　Chair: O. Kisanuki

1-6-MT12-1 Clinical results of intramedullary nailing for proximal humeral fractures -Usefulness of motivation for postoperative range of motion training- …… S225
Dept. of Orthop. Surg., Sendai Tokushukai Hosp.　Hisayoshi Inoue

1-6-MT12-2 Muscle strength and rehabilitation in acute postoperative phase of femoral trochanteric fracture with posterolateral bone fragment fixation …… S226
Dept. of Rehabilitation, Kainan Hosp.　Tasuku Kameyama

1-6-MT12-3 Examination of the case group that was able to walk independently within one week after BFN surgery for femoral trochanteric fracture …… S226
Fushimi Momoyama General Hosp.　Ikufumi Yamada

1-6-MT12-4 Comparative study of rehabilitational gait analysis videotaped with smartphones to post-operative patients of proximal femoral fractures …… S227
Dept. of Orthop., Nishi Hosp.　Mitsuaki Noda

1-6-MT12-5 Can the number of teeth in patients with proximal femur fracture predict postoperative prognosis? …… S227
Aizu Chuo Hosp. Traumatology and Reconstructive Surg. Center　Kotaro Sorimachi

Main Theme13　Active conservative therapy

(10：40～11：10)　　Chair: T. Ishiguro

1-6-MT13-1 Considering aggressive conservative therapy in the treatment of fractures requiring systemic management …… S228
Dept. of Emergency and Critical Care, Bellland General Hosp., Osaka, Japan　Mitsuhide Hamaguchi

1-6-MT13-2 The success rate of the manual reduction and the completion rate of the conservative therapy to riding type fractures of the pediatric forearm fracture -I am aiming to the minimally invasive therapy- …… S228
Izumi Orthop. Surg. Hosp.　Kazuhiko Koseki

1-6-MT13-3 Treatment of Mayo type 2 olecranon fracture in our clinic …… S229
Dept. of Orthop. Surg., Eastern Chiba Medical Center　Hiromasa Wakita

1-6-MT13-4 Conservative treatment of fragility fracture of the pelvis in the elderly … S229
Dept. of Orthop. Surg., Omoromachi Medical Center, Naha City, Japan　Kazuhiro Okuda

1-6-MT13-5 Non-operative treatment for the fragility fractures of the sacrum …… S230
Dept. of Orthop. Surg., Naze Tokushukai Hosp., Amami, Japan　Minoru Kashihara

Main Theme14　Sonography in fracture management

(11：20～12：00)　　Chair: T. Akasaka

1-6-MT14-1　Effectiveness of Intra-Operative Ultrasound Evaluation of Dorsal Screw Penetration of Volar Locking Plate in Distal Radius Fracture …… S230

Dept. of Orthop. Surg., Tokyo Women's Medical Univ., Tokyo, Japan　Nahoko Iwakura

1-6-MT14-2　Perioperative pain management using ultrasound-guided femoral nerve block for femoral intertrochanteric fracture …… S231

Dept. of Orthop. Surg., Kyorin Univ. School of Medicine　Tomohiro Watanabe

1-6-MT14-3　Treatment for elderly intertrochanteric fracture with The Fascia Iliaca Compartment Block as The Primary Intraoperative Anesthesia…… S231

Dept. of Emergency and Intensive Care, Univ. of Occupational Environmental Health Japan, Fukuoka, Japan　Naohito Sato

1-6-MT14-4　Case report : Plate fixation of clavicle fractures is possible using ultrasound-guided block alone …… S232

Dept. of Orthop. Surg. Gunma Univ. Graduate School of Medicine　Takuma Kachi

1-6-MT14-5　Ultrasound-guided nerve block for clavicle fracture surgery shortens waiting period before surgery …… S232

Mitoyo General Hosp.　Masahiro Kiyono

1-6-MT14-6　Ultrasound-guided platelet-rich plasma (PRP) therapy and aggressive rehabilitation for fractures …… S233

Hada Medical Clinic, Tokyo, Japan /
Dept. of Orthop. Surg., Juntendo Univ. School of Medicine, Tokyo, Japan　Shinnosuke Hada

Noontime Lecture 6

(12：25～13：25)　　Chair: K. Oae

1-6-NL6-1　Learn from experiences and update your strategies for clavicle fracture　S557

Ibaraki Seinan Medical Center Hosp.　Masafumi Uesugi

Main Theme15　Open fractures（Gustilo Ⅲ）

（13：40～14：30）　　Chair: Y. Kobayashi

1-6-MT15-1　The strategy of grey zone between 3A and 3B open tibial shaft fractures　S233
Trauma Center, Shonan Kamakura General Hosp., Kanagawa, Japan　Kanako Tsuihiji

1-6-MT15-2　The understanding of "open fracture morphology due to injury factors" helps to determine the need for additional skin incision and how to deal with the open wound …… S234
Traumatology and Reconstructive Surg. Center Aizu Chuo Hosp., Fukushima, Japan / Dept. of Traumatology and Reconstructive Surg., Fukushima Medical Univ. School of Medicine, Fukushima, Japan　Satoshi Hatashita

1-6-MT15-3　Treatment of Gustilo IIIA/B tibia open fractures …… S234
Urasoe General Hosp.　Noriaki Nakamura

1-6-MT15-4　Clinical outcome of Gustilo 3A/3B open tibial shaft fracture aged 75 years and over …… S235
Dept. of Orthop. Surg., Tsukuba Medical Center Hosp.　Tokio Kawamura

1-6-MT15-5　Characteristics of a case of open fracture of the lower leg diaphysis progressing from GustiloType 2 and 3A to 3B …… S235
Extremity Trauma Center, School of Medicine, Univ. of Occupational and Environmental Health　Daishi Hamada

1-6-MT15-6　Treatment strategy for the tibial shaft open fractures Gustilo Anderson classification type IIIB …… S236
Saitama Medical Center　Tsubasa Takahashi

1-6-MT15-7　Clinical results of Gustilo type III open fractures of the lower extremity: Evaluation of infection cases …… S236
Dept. of Emergency and Critical Care Medicine, Tohoku Univ. Hosp.　Atsushi Kogure

1-6-MT15-8　Clinical outcomes of Gustilo type 3 open fracture-dislocation of the ankle　S237
Dept. of Trauma Reconstruction Center, Shinyurigaoka General Hosp., Kanagawa, Japan　Takahiko Nakano

Main Theme16　Popliteal artery injury

（14：40～15：00）　　Chair: K. Kawamura

1-6-MT16-1　Five cases of popliteal artery injury associated with trauma around the knee and future treatment protocol …… S237
Dept. of Orthop. Surg., Kobe City Medical Center General Hosp.　Sadaki Mitsuzawa

1-6-MT16-2　Revascularization approach for popliteal artery injury …… S238
Orthop. Trauma Center, Sapporo Higashi Tokushukai Hosp., Sapporo, Japan　Yuta Izawa

1-6-MT16-3　A case of traumatic popliteal artery spasm diagnosed by intraoperative angiography …… S238
Orthop. Trauma Center, Sapporo Higashi Tokushukai Hosp., Sapporo, Japan　Yuta Izawa

Main Theme17　Extensive bone loss（Masquelet technique）

（15：10〜15：50）　Chair: I. Ohno

1-6-MT17-1 A useful method to maintain bone graft in the Masquelet reconstruction surgery of femur bone defect …… S239

Dept. of Orthop. Surg., Hyogo Prefectural Nishinomiya Hosp.　Takahiro Niikura

1-6-MT17-2 Reconstruction for the treatment of large bone defect due to trauma using Masquelet method …… S239

Dept. of Orthop. Surg., Kitasato Univ., Kanagawa, Japan　Terumasa Matsuura

1-6-MT17-3 Masquelet technique for comminuted open femoral fracture with huge bone defect …… S240

Dept. of Orthop. Surg., Kansai Medical Univ. Hosp., Osaka, Japan　Ken Ashida

1-6-MT17-4 Treatment results of the Masquelet technique for the patients with congenital pseudoarthrosis of tibia…… S240

Dept. of Orthop. Surg., Hyogo Prefectural Nishinomiya Hosp.　Takahiro Niikura

1-6-MT17-5 Novel Finding of Masquelet technique in rat femoral critical sized bone model by basic research …… S241

Juntendo Univ. Urayasu Hosp. Hand Surg. & Trauma Reconstruction Center /
Dept. of Medicine for Orthop. and Motor Organ, Juntendo Univ. Graduate School of Medicine
Masao Suzuki

1-6-MT17-6 Effect of indigocarmine mixed bone cement on clinical outcomes in Masquelet technique …… S241

Trauma & Reconstruction Center, Teikyo Univ. Hosp. /
Dept. of Orthop. Surg., Teikyo Univ. School of Medicine　Toshimitsu Sato

Main Theme18　Delayed union /Nonunion

(16：00～16：30)　　Chair: K. Oe

1-6-MT18-1　Treatment for posttraumatic non-union of lower-extremities …… S242
Dept. of Emergency Healthcare and Disaster Medicine, Okayama Univ.　Takenori Uehara

1-6-MT18-2　The reason why the screw loosening of the posterolateral plate or nonunion at a supracondylar level of the lateral epicondyle happens in cases of orthogonal plate configuration in distal humeral fractures …… S242
Orthop. Surg., Juntendo Univ. Urayasu Hosp., Chiba, Japan　Akira Hara

1-6-MT18-3　Effect of Low-Intensity Pulsed Ultrasound on osteogenic differentiation and angiogenesis of induced membrane-derived cells in vitro …… S243
Dept. of Orthop. Surg., Kobe Univ. Graduate School of Medicine　Kyohei Takase

1-6-MT18-4　Experience with aggressive conservative therapy with platelet-rich plasma for non-union fractures …… S243
Hada Medical Clinic, Tokyo, Japan / Dept. of Orthop., Juntendo Univ. Faculty of Medicine, Tokyo, Japan
Shinnosuke Hada

1-6-MT18-5　Treatment of distal phalanx injury with bone defect requiring bone graft　S244
Orthop. Surg., Hand Surg. and Microsurgery Center, Nagoya Tokushukai General Hosp.
Hideyuki Mizushima

Case Reports (Failures, etc.)

(16：40～17：10)　　Chair: T. Ohata

1-6-CR-1　A case of systemic lupus erythematosus with rotator cuff tear after proximal humerus fracture surgery …… S289
Dept. of Orthop. Surg., Minami Nara General Medical Center　Keisuke Tsujimura

1-6-CR-2　A revision case due to fractured total elbow arthroplasty for osteoarthritis secondary to malunited fracture …… S289
Dept. of Orthop. Surg., Kenwakai Otemachi Hosp.　Kazuhiro Sakai

1-6-CR-3　A case of lateral femoral circumflex artery branch injury due to reduction operation during surgery for femoral trochanteric fracture …… S290
Dept. of Orthop., Chubu Rosai Hosp.　Takahiro Wakayama

1-6-CR-4　A case of early postoperative backout of a sternal fracture pseudarthrosis fixed with a volar distal radius locking plate …… S290
Saitama Red Cross Hosp., Saitama, Japan　Shota Den

1-6-CR-5　A case of fatal pulmonary thromboembolism during surgical treatment of distal femoral fracture …… S291
Dept. of Orthop. Surg., Higashiyamato Hosp.　Yu Yamashita

Day1・Room A（9F 910）

Young Surgeons Session 1　The Basics of Initial Treatment for Severe Extremity Limb Trauma

（8：30～10：30）

Treatment Flow for Severe Open fractures of the Lower Leg on the Day of injury

Chair: K. Hayashi

1-A-YS1-1　How to bring patients with severe open fractures to an operation room safely: Resuscitation and Neurovascular assessment …… S507

Yokohama City Univ. Medical Center, Advanced Critical Care and Emergency Center
Masahiro Matsumoto

1-A-YS1-2　How to perform an initial operation for severe open fractures:Debridement and External fixation …… S507

Div. of Orthop. Trauma Center, Sapporo Tokushukai Hosp.　Hirotada Matsui

1-A-YS1-3　How to evaluate severe open fractures in the operation room and to plan internal fixation and soft tissue reconstruction surgery: Injury evaluation seat and Reconstruction…… S507

Juntendo Univ. Urayasu Hosp., Hand Surg. & Trauma Reconstruction Center　Masao Suzuki

Key point in the intial treatment of Severe Extremity trauma: A Case-based Presentation

Chair: H. Matsui

1-A-YS1-4　How to evaluate and treat patients who are supected of suffering a popliteus artery injury…… S507

Osaka City General Hosp.　Keisuke Suzuki

Chair: M. Suzuki

1-A-YS1-5　How to stabilize severe open fractures:Tips and tiricks for external fixation …… S507

Trauma Center, Shonan Kamakura General Hosp.　Ryo Sato

Chair: K. Suzuki

1-A-YS1-6　How to perform delayed primary closure: Time-out method …… S507

Dept. of Plastic and Reconstructive Surg., Chang Gung Memorial Hosp., Taiwan /
Dept. of Orthop., Ogori Daiichi General Hosp.　Kota Hayashi

Young Surgeons Session 2　Strike a gong! It's Fracture WrestlIing Entertainment show!

(10：55～11：55)

Producer: K. Tsuihiji
Announcer: K. Sorimachi
Commentator: S. Tsutsui
Referee: M. Mastumoto

1st Tag Match　Subtrochanteric femur fractures

Player …… S508
Akita Univ., Akita, Japan　Motoki Mita

Player …… S508
Hyogo Emergency Medical Center, Hyogo, Japan　Ryowa Mineo

VS

Player …… S508
Southern TOHOKU General Hosp., Fukushima, Japan/Nagoya City Univ., Aichi, Japan　Hiroki Yonezu

Player …… S508
Mito Saiseikai General Hosp., Ibaraki, Japan/Niigata Univ., Niigata, Japan　Yuma Yoshida

2nd Tag Match　Soft tissue management in open fracture

Player …… S508
Chang Gung Memorial Hosp., Taiwan/Ogori Daiichi General Hosp., Yamaguchi Japan　Kota Hayashi

Player …… S508
Hiroshima Univ., Hiroshima, Japan　Yuta Hayashi

VS

Player …… S508
Juntendo Univ. Shizuoka Hosp., Shizuoka, Japan　Tomoko Wakejima

Player …… S508
Kariya Toyota General Hosp., Aichi, Japan　Takahiko Nakano

Noontime Lecture 7

(12：25～13：25)

Chair: T. Matsumura

1-A-NL7-1　Knotless suture for satisfactory wound healing …… S558
Dept. of emergency and critical care medicine, Saitama Medical Center　Yasuhisa Ueda

1-A-NL7-2　ABCDE approach in the wound closure of the trauma surgery …… S559
Orthop. Trauma and Reconstruction Center　Shimpei Kitada

Young Surgeons Session 3　Hands-on Basic Fracture Operative Techniques

(15：00～17：00)

Coordinator: T. Miyake
Y. Mizuno
T. Inaba

1-A-YS3-1　How to approach trauma orthopedic surgery from a nurse's perspective -Preparation with an awareness of the surgical process- …… S509
Trauma Center, Shonan Kamakura Hosp., Kanagawa, Japan　Taiki Inaba

1-A-YS3-2　Let's understand the function (role) and structure (difference) of the screw and do it!　-Practice the lag screw technique with an actual screw …… S509
Advanced Critical Care Center, Gifu Univ. Hosp., Gifu, Japan　Yosuke Mizuno

1-A-YS3-3　Let's understand the function (role) and structure (difference) of the plate and do it!　-Practice with the actual Compression Plate …… S509
Advanced Critical Care Center, Gifu Univ. Hosp., Gifu, Japan　Takahito Miyake

Day1・Room B（9F 904）

Multi Purpose Room 1　Surgical Strategies for Proximal Humeral Fracture
（8：50～10：20）

1-B-MP1-1 …… S576
Juntendo Univ. Shizuoka Hosp. Shuichi Moriya

1-B-MP1-2 …… S576
Fujita Health Univ. Bantane Hosp. Mitsuko Yamada

Echo Hands-on Seminar
Recommendations for Ultrasound-guided Anesthesia - Usage in the Trauma Field
（13：40～15：40）　**Chairs: J. Sasahara**
K. Miyatake

1-B-EH-1 The best Hands-on for upper limb ultrasound-guided nerve block anesthesia/ Ultrasound: A powerful tool for upper limb injuries …… S520
Niigata Rosai Hosp. Yohei Sakai

1-B-EH-2 The best Hands-on for lower limb ultrasound-guided nerve block anesthesia/ Ultrasound: A powerful tool for lower limb injuries…… S520
Dept. of Orthop. Saiseikai Nara Hosp. Yoshiyuki Kamatani

Hands-on Instructor …… S520
Heartlife Hosp. Orthop. Surg. Naori Akamine

Hands-on Instructor …… S520
JCHO Tokyo Takanawa Hosp. Takahiro Kashiyama

Hands-on Instructor …… S520
Yokohama City Univ. Dept. of Orthop. Hiroki Katayama

Hands-on Instructor …… S520
Dept. of Orthop. Saiseikai Nara Hosp. Yoshiyuki Kamatani

Hands-on Instructor …… S520
Niigata Rosai Hosp. Yohei Sakai

Hands-on Instructor …… S520
Sagamihara Kyodo Hosp. Shinya Tsujiku

Hands-on Instructor …… S520
Dept. of Orthop. Surg., Niigata Central Hosp. Kazuya Yamada

Hands-on Instructor …… S520
Institute for Integrated Sports Medicine, School of Medicine, Keio Univ. Yuichi Yamada

Day1・Room C（9F 908）

Multi Purpose Room 2 **Application of the steel wire external fixator JuNction forupper extremity fractures**

（10：30～12：00） **Chair: K. Naito**

1-C-MP2-1 …… S577
Dokkyo Medical Univ. Saitama Medical Center Hidetsugu Suzuki

1-C-MP2-2 …… S577
Chiba Univ. Hosp. Yuusuke Matsuura

Multi Purpose Room 3

（15：40～17：40） **Chair: H. Nonomiya**

1-C-MP3-1 The secrets of external fixiation for limbs -How to make cast and splint- S578
Dept. of Orthop. Surg., Kamitsuga General Hosp. Satoshi Takahata

Day1・Room D（10F 1003）

Multi Purpose Room 4　Consider Treatment from Both Bone and Soft Tissue Perspectives: Applications of SpeedBridge™, InternalBrace™, DynaNite™ to Trauma Area

（9：00～14：00：Workshop, 14：30～16：00：Hands-on）

1-D-MP4-1 …… S579
Gifu Prefectural General Medical Center　Hiroyuki Tanahashi

1-D-MP4-2 …… S579
Okada Orthop. clinic　Hirokazu Okada

1-D-MP4-3 …… S579
Fukuoka Seisyukai Hosp.　Kazuki Kanazawa

Day1・Room E（10F 1002）

Combined Session of the Japanese Association for Limb Reconstruction and External Fixation（JALREF）and the JSFR
Hands-on Seminar: Temporary External Fixator Fracture Treatment Manual
- Practical Application in the Field

（13：40〜15：40） **Chair: N. Takenaka**

1-E-EF-1 …… S519
Dept. of Traumatology, Fukushima Medical Univ., Fukushima, Japan / Trauma & Reconstruction Center, Southern TOHOKU General Hosp., Fukushima, Japan Narutaka Katoh

1-E-EF-2 …… S519
Dept. of Traumatology, Fukushima Medical Univ., Fukushima, Japan / Trauma & Reconstruction Center, Southern TOHOKU General Hosp., Fukushima, Japan Motoyuki Takaki

1-E-EF-3 …… S519
Dept. of Traumatology, Fukushima Medical Univ., Fukushima, Japan / Trauma & Reconstruction Center, Southern TOHOKU General Hosp., Fukushima, Japan Shota Harada

1-E-EF-4 …… S519
Dept. of Orthop. Surg., Akita Univ. Graduate School of Medicine, Akita, Japan Koji Nozaka

1-E-EF-5 …… S519
Dept. of Orthop. Surg., Chikamori Hosp., Kochi, Japan Yukinobu Nishii

Day1・Room F（1F Main Hall "Ocean"）

Noontime Lecture 8
（12：25〜13：25） **Chair: N. Takenaka**

1-F-NL8-1 Prevention of postoperative pain and delirium in elderly patients with hip fractures by medical teams …… S560
Dept. of Anesthesiology and Intensive acre, Akita Univ. School of Medicine Yukitoshi Niiyama

1-F-NL8-2 Perioperative management of elderly patients with hip fractures …… S561
Dept. of Orthop. Surg., Toyama City Hosp., Toyama, Japan Kenji Shigemoto