

# SCIENTIFIC PROGRAM

October 12 (Thu.)

**Opening Remarks**

8:00 - 8:10

**Takashi Matsushita**

**Room A**

President of 4th Meeting of A.S.A.M.I. International

President of A.S.A.M.I. International

**Presidential Guest Lecture I**

8:10 - 8:40

**Maurizio A. Catagni**

**Room A**

**Moderator: Mahir Gulsen**

**The Ilizarov method for cosmetic leg lengthening**

Maurizio A. Catagni, Luigi Loviseti, Francesco Guerreschi

Dept. of Orthopedics, Alessandro Manzoni Hosp., Italy

**Free Paper A-01**

8:40 - 9:20

**Cosmetic Lengthening**

**Room A**

**Moderators: Maurizio A. Catagni, Hiroyuki Tsuchiya**

**1-A-01**

**Shortness of the fourth toe**

Gamal Ahmed Hosny

Benha Univ., Cairo, EGYPT

**1-A-02**

**Deformity correction of lower extremity in pseudoachondroplasia using the Ilizarov method**

Hae Ryong Song

Dept. of Orthop. Surg., Korea Univ. Med. Center, Republic of Korea

**1-A-03**

**Lower limb lengthening in Turner dwarfism**

Soo Bong Hahn, Hong Kyun Kim, Hyun Woo Kim, Hui Wan Park

Dept. of Orthop. Surg., Yonsei Univ., Republic of Korea

**1-A-04**

**New aspects of distractional osteosynthesis in treatment of patients with sequelae of ischemic lesions of cerebrum**

Alexander T. Khudiaev, Vladimir I. Shevtsov, Alexander N. Diachkov, Oksana G. Prudnikova

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**1-A-05**

**The aesthetic surgery of the lower extremities**

Alexander A. Artemiev<sup>1</sup>, Arshak E. Mirzoyan<sup>2</sup>

<sup>1</sup>Mytischki City Hosp., Moscow Region, Russia <sup>2</sup>Yerevan Center of Libmb Lengthening and Reconstruction, Armenia

**Break**

9:20 - 9:40

Free Paper A-02

9:40 - 10:20

## Congenital Disease

Room A

Moderators: In-Ho Choi, Hidehiko Kawabata

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### 1-A-06

#### Limb saving in hemimelia by Ilizarov method

Hidehiko Kawabata, Daisuke Tamura, Morohiro Kitano, Toru Shibata, Mayuko Wada, Hidefumi Shimoazono, Kiyoshi Yoshida, Ruiko Takagi

Dept. of Orthop. Surg., Osaka Med. Center and Research Inst., for Maternal and Child Health, Japan

### 1-A-07

#### Lengthening reconstruction surgery for treatment of fibular hemimelia

Dror Paley<sup>1</sup>, Said Saghie<sup>2</sup>, Baek Yong Song<sup>3</sup>, M. Young<sup>1</sup>, John E. Herzenberg<sup>1</sup>

<sup>1</sup>Rubin Inst. for Advanced Orthop., Sinai Hosp. of Baltimore, USA, <sup>2</sup>American Univ. of Beirut, Lebanon, <sup>3</sup>Dept. of Orthop. Surg., Eulji General Hosp., Eulji Univ. Sch. of Med., Republic of Korea

### 1-A-08

#### Factors affecting distraction osteogenesis at the proximal tibial segment in congenital pseudoarthrosis of the tibia patients

Ki Seok Lee, Tae-Joon Cho, In Ho Choi, Won Joon Yoo, Chin Youb Chung, Sang Min Lee

Dept. of Orthop. Surg., Seoul Nat'l Univ. Children's Hosp., Republic of Korea

### 1-A-09

#### Bilateral congenital dislocation of the knee in Larsen's syndrome treated with the Ilizarov external fixator

Leif Pål Kristiansen, Harald Steen, Terje Terjesen

Orthop. Dept., Nat'l Hosp., Norway

### 1-A-10

#### Treatment of children with congenital dislocation of hip using Ilizarov fixator

Vladimir I. Shevtsov, Mikhail P. Tyoplenkiy

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

## Symposium I

10:20 - 12:00

## Congenital Pseudoarthrosis of the Tibia

Room A

Moderators: Michael Weber, Natsuo Yasui

### S1-1

#### Treatment of congenital pseudoarthrosis of tibia

Franz Grill

Dept. for Paediatric Orthopaedics, Orthop. Hosp., Austria

### S1-2

#### Autologous periosteum free graft for congenital pseudoarthrosis of the tibia

Natsuo Yasui, Yoshito Matsui, Mitsuhiro Takahashi, Kiminori Yukata, Yoshiteru Kawasaki

Dept. of Orthopaedics, The Univ. of Tokushima Graduate Sch., Japan

### S1-3

#### Congenital pseudoarthroses of tibia

Vladimir I. Shevtsov

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

# SCIENTIFIC PROGRAM

## S1-4

### **Congenital pseudarthrosis; new classification, comprehensive treatment with periosteal and bone grafting, ex fix and IM rodding**

Dror Paley

Rubin Inst. for Advanced Orthopaedics, International Center for Limb Lengthening, Sinai Hosp. of Baltimore, U.S.A.

## S1-5

### **Ilizarov treatment of atrophic congenital pseudarthrosis of the tibia: Refracture and importance of consideration for fibular pseudarthrosis**

In-Ho Choi, Tae-Joon Cho, Sang-Min Lee, Chin-Youb Chung, Won-Joon Yoo

Dept. of Orthop. Surg., Seoul National Univ., Republic of Korea

**Lunch**

12:00 - 13:15

**Poster Discussion**

Room Sakura

**Instructional Course Lecture I**

13:15 - 13:35

**Selvadurai Nayagam**

Room A

### **Defining a role for circular external fixation in tibial fractures**

Selvadurai Nayagam

Dept. of Orthop. Surg., Royal Liverpool Univ. and Children's Hosp., UK

**Instructional Course Lecture II**

13:35 - 13:55

**David Marsh**

Room A

### **Results of a RCT of Ilizarov vs IM nail for closed tibial shaft fractures**

David Marsh<sup>1</sup>, Chris Andrews<sup>2</sup>, Sinead McDonald<sup>2</sup>, Pat Carton<sup>2</sup>, Anuj Dogra<sup>2</sup>, Raman Kalyan<sup>2</sup>,

Louis O'Connor<sup>2</sup>

<sup>1</sup>Inst. of Orthopaedics and Musculoskeletal Science, Univ. College London, <sup>2</sup>Royal Victoria Hosp., UK

**Instructional Course Lecture III**

13:55 - 14:15

**Mahir Gulsen**

Room A

### **Alternative techniques for bone and soft tissue defects: Angular compression, titanium cages, transposition of fibula**

Mahir Gulsen, Cenk Ozkan

Dept. of Orthopaedics. and Traumatology, Cukurova Univ. Fac. of Med., Turkey

**Free Paper A-03**

14:15 - 15:20

**Complex Tibia Fracture**

Room A

**Moderators: Nedzad Sabic, Naoyuki Ochiai**

## 1-A-11

### **A novel distraction technique in the arthroscopic assistant closed reduction of the tibial plateau fractures by Ilizarov fixator**

Jacob A. Odessky

Dept. of Orthop. Surg., Assaf Harofeh Med. Center, Israel

**1-A-12****The Ilizarov fixator in treating traumatic fractures-an 8 year experience**

Gautam D. Shah

Centre for Trauma Surg. &amp; Ilizarov Technique, Dr. Shah's Hosp., India

**1-A-13****Ilizarov external fixator and principles in comminuted fracture tibia**Mohamed Fadel<sup>1</sup>, Gamal Hosny<sup>2</sup>, Mohamed El-Shafie<sup>1</sup><sup>1</sup>Dept. of Orthop. Surg., El-Minia Univ., <sup>2</sup>Dept. of Orthop. Surg., Benha Univ., Egypt**1-A-14****Transosseous wiring osteosynthesis (Ilizarov) in treatment of complex tibial fractures**

Yehia AbdAllah Rady

Orthop. Surg. Dept., Nat'l Med. Inst. in Damanhour, Egypt

**1-A-15****The versatility of Ilizarov principles in open fracture tibia**Mohamed Fadel<sup>1</sup>, Gamal Hosny<sup>2</sup><sup>1</sup>Dept. of Orthop. Surg., El-Minia Univ., <sup>2</sup>Dept. of Orthop. Surg., Benha Univ., Egypt**1-A-16****Ilizarov method, for all types and all levels of fracture tibia**

Shibu John Varkey, Mathew George, Balaji DR

Dept. of Orthopaedics, St. Thomas Hosp., India

**1-A-17****Outcome analysis of combined Ilizarov external fixation, bone transport, and free tissue transfer for lower extremity salvage**David W. Lowenberg<sup>2</sup>, Serge Kaska<sup>2</sup>, Karen M. Horton<sup>1</sup>, Kevin W. Louie<sup>2</sup>, Darrell Brooks<sup>1</sup>, Rudolf F. Buntic<sup>1</sup>, Gregory Buncke<sup>1</sup>The Buncke Clinic Inst. for Plastic & Reconstructive Surg., Hand Surg. and Microsurgery., <sup>2</sup>Dept. of Orthopedics Surg., California Pacific Med. Center, USA**1-A-18****Flap & Frame - combined orthoplastic treatment of open tibial fractures**Simon Britten<sup>1</sup>, Sandeep Kapoor<sup>2</sup>, Gavin Miller<sup>2</sup>, Mark Liddington<sup>1</sup>, Toby Carre Branfoot<sup>1</sup>, Mick Dennison<sup>2</sup>, Simon Royston<sup>2</sup><sup>1</sup>Dept. of Orthopaedics and Plastic Surg., St. James's Univ. Hosp., <sup>2</sup>Northern General Hosp., UK**Instructional Course Lecture IV**

15:20 - 15:40

**Sergey I. Shved****Room A****Transosseous osteosynthesis in treatment of children with multiple fractures and combined injuries**

Sergey I. Shved

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**Instructional Course Lecture V**

15:40 - 16:00

**José Carlos Bongiovanni****Room A****High energy fracture: one step bone reconstruction**

José Carlos Bongiovanni, Rubens Augusto Salvadori Martinhão, Diego Ferreira Bongiovanni, José Eduardo Sanches Arantes

Centro de Ortopedia e Traumatologia, Brazil

# SCIENTIFIC PROGRAM

Free Paper A-04

16:00 - 16:40

**Poly Trauma**

**Room A**

**Moderators:** José Carlos Bongiovanni, Satoru Ozeki

**1-A-19**

**Immediate full weight bearing ambulation Rehabilitation in patients with high energy multiple limb fractures**

Sultan M. Al-Maskari, Yahya Al-Kindy, Amr AG El-khouly

Dept. of Orthop. & Trauma Surg., Khoula Hosp., Oman

**1-A-20**

**Functional restoration after severe war injuries to extremities (protocol of staged external fixation)**

Alexander Lerner, Zvi Horesh, Michael Soudry

Dept. Orthop. "A", "Rambam" Med. Center and Med. Fac. of the Technion, Israel

**1-A-21**

**Complex fractures of long bones- management by Ilizarov technique**

Srinivas Reddy Nookala<sup>1</sup>, Yogesh Ananth Godbole<sup>2</sup>

<sup>1</sup>Dept. of Orthopaedics, Rohini Hosp., <sup>2</sup>Omkar Orthop. Hosp., India

**1-A-22**

**Peculiarities of transosseous osteosynthesis in management of patients with multiple fractures and combined injuries**

Sergey I. Shved

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**1-A-23**

**External skeletal fixation of multiple skeletal injuries**

Adel E. Khamis<sup>1</sup>, Mohamed Mahmoud Fade<sup>2</sup>, Gamal Ahmed Hosny<sup>3</sup>

<sup>1</sup>Dept. of Orthop. Surg., Egyptian Military Hosp., <sup>2</sup>Dept. of Orthop. Surg., El-Minia Univ., <sup>3</sup>Dept. of Orthop. Surg., Benha Univ., Egypt

**Break**

16:40 - 17:00

**Current Topics I**

17:00 - 18:00

**Mechanical Properties of Callus and Bone**

**Room A**

**Moderators:** David Marsh, Yoshinobu Watanabe

**CTI-1**

**Summary of the international symposium for assessment of mechanical properties of callus and bone**

Peter Augat

Biomechanics Laboratory, Trauma Center Murnau and Paracelsus Private Med. Univ., Germany

**CTI-2**

**Monitoring mechanical strength of healing bone in distraction osteogenesis**

Yoshinobu Watanabe

Dept. of Orthop. Surg., Teikyo Univ. Sch. of Med., Japan

Moderators: James C. Binsky, David March

**1-A-24****Tibia lengthening in automatic high-frequency mode**Pyotr S. Vvedensky<sup>1</sup>, Alexandr B. Bogosyan<sup>1</sup>, Nikolay A. Tenilin<sup>1</sup>, Konstantin E. Mikheev<sup>2</sup>, Ekaterina V. Donchenko<sup>3</sup><sup>1</sup>Dept. of Pediatrics Orthop., Nizhny Novgorod Research Inst. of Traumatology and Orthopaedics, <sup>2</sup>Russian, Federal Nuclear Center-All-Russian Scientific and Research Inst. of Experimental Physics, <sup>3</sup>Dept. of Information and Data Analysis, Nizhny Novgorod Research Instit. of Traumatology and Orthopaedics, Russia**1-A-25****Limb lengthening by increased rate of distraction**

Arnold V. Popkov

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**1-A-26****Bone lengthening with distraction osteogenesis. Correlation between healing index and complications, bone segment, age of patients and grade of lengthening**Eirini K. Iosifidou, Ippokratis Hatzokos, Vasilios Kefalas, Kyriakos Giannoulis, Byron Chalidis, John D. Pournaras  
1st Orthop. Dept., Aristotle Univ., Greece**1-A-27****Tensile forces in simultaneous bifocal and bilateral leg lengthening with different distraction rates**Harald Steen, Leif Pål Kristiansen, Joachim Horn, Gudrun Trøite Aarnes, Per Ludvigsen  
Rikshospitalet Orthop. Dept., Univ. Hosp. Oslo, Norway**1-A-28****Predicting bone regeneration in the Ilizarov distraction epiphyseolysis**

Zinaida I. Gorbunova

Dept. of Pediatric Orthopaedics., Ural Scientific Research Inst. of Traumatology and Orthopaedics., Russia

**1-A-29****"Acute" bone lengthening**

Andrzej Gregosiewicz, Tomasz Raganowicz, Michal Latalski

Children Orthop. Dept. Med. Univ. of Lublin, Poland

**1-A-30****Deformity correction in the lower limb in children by external fixation -a comparison of acute and gradual techniques**Ashok Goel, Sharon Atherton, Joanne MacCaughrean, Rosemary Davies, Selvadurai Nayagam  
Dept. of Orthop. Surg., Royal Liverpool Children's Hosp., UK

# SCIENTIFIC PROGRAM

Free Paper B-01

9:40 - 10:15

**Hip Joint in Adults**

Room B-1

Moderators: Zvi Horesh, Shigeru Nakamura

**1-B-01**

**Distraction arthrodiastasis of the hip joint in patients with sickle cell disease**

Sultan M. Al-Maskari, Fatma R. Al-Hajri, Amr AG El-khouly

Dept. of Orthop. & Trauma Surg., Khoula Hosp., Oman

**1-B-02**

**Treatment of patients with fractured neck of femur by external fixators**

Arshak E. Mirzoyan, Seiran V. Saroyan

Yerevan Center of Limb Lengthening and Reconstruction, Armenia

**1-B-03**

**Treatment of comminuted acetabular fractures by ligamentotaxis and minimal invasive fixation with Ilizarov frame**

Nuno F. Craveiro-Lopes, Carolina Escalda, Carlo Villacreses

Limb Lengthening and Reconstruction Unit, Orthop. and Trauma Dept., Garcia de Orta Hosp., Almada, Portugal

**1-B-04**

**Pelvic support osteotomy with monolateral Orthofix Limb Reconstruction System**

Richard Luzzi

Dept. of Orthop. Surg., Paraná Catholic Univ., Brazil

**1-B-05**

**Peri-acetabular half-pin placement for external fixation around the hip joint**

Sean Brown, Irwin Lasrado, Leo Thomas Donnan

Dept. of Orthop. Surg., Royal Children's Hosp., Melbourne, Australia

Free Paper B-02

14:25 - 15:10

**Basic Science**

Room B-1

Moderators: John G. Birch, Takanobu Nakase

**1-B-06**

**Bone healing and iNOS expression on closed rat femur with intramedullary fixation**

Richard Luzzi<sup>1</sup>, Sergio Ossamu Ioshi<sup>2</sup>

<sup>1</sup>Dept. of Orthopedics. and Traumatology, Parana Catholic Univ., <sup>2</sup>Dept. of Pathology, Parana Catholic Univ., Brazil

**1-B-07**

**Effects of diclofenac and tenoxicam on distraction osteogenesis**

Cengiz Sen<sup>1</sup>, Mehmet Erdem<sup>1</sup>, Taner Gunes<sup>1</sup>, Resid Dogan Koseoglu<sup>2</sup>, Nurper Onuk Filiz<sup>2</sup>, Bora Bostan<sup>1</sup>

<sup>1</sup>Dept. of Orthopedics. and Traumatology, Gaziosmanpasa Univ., <sup>2</sup>Dept. of Pathology, Gaziosmanpasa Univ., Turkey

**1-B-08**

**Effects of calcitonin and alendronate on distraction osteogenesis**

Cengiz Sen<sup>1</sup>, Taner Gunes<sup>1</sup>, Mehmet Erdem<sup>1</sup>, Resid Dogan Koseoglu<sup>2</sup>, Nurper Onuk Filiz<sup>2</sup>, Bora Bostan<sup>1</sup>

<sup>1</sup>Dept. of Orthopedics. and Traumatology, Gaziosmanpasa Univ., <sup>2</sup>Dept. of Pathology, Gaziosmanpasa Univ., Turkey

**1-B-09**

**Expression and role of interleukin-6 in distraction osteogenesis**

Tae-Joon Cho<sup>1</sup>, Won Joon Yoo<sup>1</sup>, Chin Youb Chung<sup>1</sup>, Jin A. Kim<sup>1</sup>, Louis C. Gerstenfeld<sup>2</sup>,

Thomas A. Einhorn<sup>2</sup>, In Ho Choi<sup>1</sup>

<sup>1</sup>Dept. of Orthop. Surg., Seoul Nat'l Univ., Republic of Korea, <sup>2</sup>Dept. of Orthop. Surg., Boston Univ., USA

**1-B-10****Bone transport with bone morphogenetic protein loaded hydroxyapatite**

Koji Watanabe, Hiroyuki Tsuchiya, Keisuke Sakurakichi, Hidenori Matsubara, Katsuro Tomita  
Dept. of Orthop. Surg., Kanazawa Univ., Japan

**1-B-11****Mobilization of endothelial progenitor cells during the fracture healing and the distraction osteogenesis**

Tae-Joon Cho, Dong Yeon Lee, In Ho Choi, Chin Youb Chung, Won Joon Yoo, Jin A. Kim  
Dept. of Orthop. Surg., Seoul Nat'l Univ., Republic of Korea

**Free PaperB-03**

16:10 - 16:40

**Biomechanics****Room B-1****Moderators: Peter Augat, Yoshinobu Watanabe****1-B-12****An asymmetrical thread profile external fixation pin has better pullout strength than a symmetrical thread pin**

Satoru Ohashi, Isao Ohnishi, Jyuntaro Matsuyama, Takuya Matsumoto, Masahiko Bessho, Kozo Nakamura  
Dept. of Orthop. Surg., Univ. of Tokyo, Japan

**1-B-13****The stiffness characteristics of the C arches, Schanz pins on the hybrid Ilizarov fixators**

Önder Baran<sup>1</sup>, Gunhan Dilber<sup>1</sup>, Mehmet Erduran<sup>1</sup>, Lutfu Baktaroglu<sup>1</sup>, Berivan Erik<sup>2</sup>, Hasan Havitçioğlu<sup>1</sup>,  
<sup>1</sup>Dept. of Orthop. Surg., Dokuz Eylul Univ., <sup>2</sup>Dept. of Biomechanics, Dokuz Eylul Univ., Turkey

**1-B-14****Biomechanical evaluation of tibia plateau fractures with Ilizarov ring fixator systems**

Önder Baran<sup>1</sup>, Ahmet Turan<sup>1</sup>, Lutfu Baktaroglu<sup>1</sup>, Ibrahim Mutlu<sup>2</sup>, Hasan Havitçioğlu<sup>1</sup>  
<sup>1</sup>Dept. of Orthop. Surg., Dokuz Eylul Univ., <sup>2</sup>Dept. of Biomechanics, Dokuz Eylul Univ., Turkey

**Free Paper B-04**

18:10 - 18:55

**Pilon Fracture****Room B-1****Moderator: Koichiro Tashiro****1-B-15****Usage of the Ilizarov external fixator for high energy tibial plafond fractures**

Kensuke Yasumura<sup>1</sup>, Satoru Ozeki<sup>1</sup>, Yutaka Nohara<sup>2</sup>  
<sup>1</sup>Dept. of Orthop. Surg., Dokkyo Med. Univ. Koshigaya Hosp., <sup>2</sup>Dept. of Orthop. Surg., Dokkyo Med. Univ., Japan

**1-B-16****Ilizarov method, for pilon and malleolar fractures**

Shibu John Varkey, Mathew George, Balaji D. R.  
Dept. of Orthopaedics, St. Thomas Hosp., India

**1-B-17****Management of complex tibial plafond fractures by ring fixator**

Elhoussein Mohamed Elmoatasem, Mootaz Foad Thakeb, Hany Mamdouh Hefny  
Dept. of Orthopaedics, Ain Shams Univ., Egypt

**1-B-18****Treatment of severe comminuted pilon fractures by Ilizarov external fixation**

Haim(Efim) Shtarker, Moshe Daniel, Alexander Kaushansky, Jack Stolero, Gershon Volpin  
Western Galilee Hosp. Israel



# SCIENTIFIC PROGRAM

## **1-B-19**

### **Preliminary report - Distal tibial pilon fractures treated by Ilizarov method**

Daniel B. Saleh, Edward J. Mills, Parmar S. Sian, J. Toby C. Branfoot, Simon Britten  
Dept. of Orthop. & Trauma Surg., St. James's Univ. Hospital, UK

## **1-B-20**

### **High energy tibial pilon fractures. Hybrid frames versus internal fixation**

Antonis K. Kouris, Dimitris L. Katsenis, Nikos K. Schoinochoritis, Vaggelis K. Karavas,  
Manolis Drakoulakis, Kostas S. Pogiatzis  
Argos General Hosp., Greece

October 13 (Fri.)

**Presidential Guest Lecture II**

8:00 - 8:30

**Vladimir I. Shevtsov**

**Room A**

**Moderator: Pawel Koczewski**

**Possibilities of transosseous osteosynthesis in restoration of soft tissues defect**

Vladimir I. Shevtsov, Sergey I. Shved

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**Free Paper A-06**

8:30 - 9:10

**Joint Contracture & Dislocation**

**Room A**

**Moderators: Dror Paley, Tomoo Ishii**

**2-A-01**

**Morphologic changes in muscles under limb lengthening**

Vladimir I. Shevtsov

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**2-A-02**

**Biomechanical considerations of joint contractures during goat tibial lengthening**

Marina Makarov, John Birch, Mikhail Samchukov

Texas Scottish Rite Hosp. for Children, USA

**2-A-03**

**Treatment of neglected posterior elbow dislocation using a hinged Ilizarov fixator**

Juanito S. Javier

Dept. of Orthopaedics., Philippine General Hosp., Univ. of The Philippines

**2-A-04**

**Mechanical distraction for the treatment of posttraumatic stiffness in children and adolescents**

Konrad Mader, Simone Kirchner, Dietmar Pennig

Dept. of Trauma and Orthop. Surg., Hand and Reconstructive Surg., St. Vinzenz- Hosp., Germany

**2-A-05**

**Mechanical distraction for the treatment of posttraumatic stiffness of the elbow in 100 adult patients**

Konrad Mader, Simone Kirchner, Dietmar Pennig

Dept. of Trauma and Orthop. Surg., Hand and Reconstructive Surg., St. Vinzenz- Hosp., Germany

**Instructional Course Lecture VI**

9:10 - 9:30

**Gamal Ahmed Hosny**

**Room A**

**Management of flexion knee deformity using a circular frame**

Gamal Ahmed Hosny<sup>1</sup>, Mohamed Mahmoud Fadel<sup>2</sup>

<sup>1</sup>Benha Univ., <sup>2</sup>Minia Univ., Egypt

Oct. 12 (Thu.)

Oct. 13 (Fri.)

# SCIENTIFIC PROGRAM

## Symposium II

9:30 - 10:50

### Joint Contracture

Room A

**Moderators:** Gamal Ahmed Hosny, Junichi Monji

#### S2-1

##### Joint Contractures

Dror Paley, MD, FRCSC

Rubin Inst. for Advanced Orthopedics, International Center for Limb Lengthening, Sinai Hosp., USA

#### S2-2

##### Joint distraction and joint motion promotes differentiation of mesenchymal cells into chondrocytes

Tomoo Ishii, Takaji Yanai, Fei Chang, Tomofumi Nishino, Chiharu Komiyama, Daisuke Nozawa, Naoyuki Ochiai

Dept. of Orthop. Surg., Univ. of Tsukuba, Japan

#### S2-3

##### Correction of talipes equinus using Ilizarov frame without hinges

Takashi Matsushita

Dept. of Orthop. Surg., Teikyo Univ. Sch. of Med., Japan

#### S2-4

##### Treatment of knee flexion deformity

José Carlos Bongiovanni

Centro de Ortopedia e Traumatologia, Brazil

## Break

10:50 - 11:10

## Instructional Course Lecture VII

11:10 - 11:30

### John G. Birch

Room A

#### Use of a modified Ilizarov apparatus for severe spinal deformities in children

John G. Birch

Dept. of Orthopedics., Texas Scottish Rite Hosp. for Children, USA

## Instructional Course Lecture VIII

11:30 - 11:50

### Nuno Craveiro-Lopes

Room A

#### Treatment of pelvic ring disruptions with Ilizarov frame. preliminary report

Nuno Craveiro-Lopes, Carolina Escalda, Carlo Villacreses

Limb Lengthening and Reconstruction Unit, Orthop. and Trauma Dept., Garcia de Orta Hosp., Portugal

Free Paper A-07

11:50 - 12:40

## Knee Deformity

Room A

Moderators: Hasan Havitcioglu, Tsukasa Teramoto

2-A-06

### Acute correction of valgus knee by acute translation with condylar plate

Hani Mohamed El-Mowafi, Mohamed Ahmed El-Refai, Barakat Said El-Alfy

Dept. of Orthop. Surg., Mansoura Univ., Egypt

2-A-07

### A new double elevating osteotomy in management of severe neglected infantile tibia vara using the Ilizarov technique

Hany M. Hefny

Dept. of Orthop., Limb Reconstruction Unit, Ain Shams Univ., Egypt

2-A-08

### The relationship between the physal line and the joint surface in the skeletally immature lower extremity: An MRI study

Muharrem Inan<sup>1</sup>, Mary K. Nagai<sup>2</sup>, William G. Mackenzie<sup>2</sup>, Leslie Grissom<sup>3</sup>

<sup>1</sup>Dept. of Orthopaedics, Malatya Hastanesi Malatya, Turkey, <sup>2</sup>Dept. of Orthopaedics Alfred I. DuPont Hosp. for Children,

<sup>3</sup>Dept. of Radiology, Alfred I. DuPont Hosp. for Children, USA

2-A-09

### Tibial slope and high tibial osteotomy using the circular external fixator

Taner Gunes, Cengiz Sen, Mehmet Erdem, Bora Bostan

Dept. of Orthopaedics and Traumatology, Gaziosmanpasa Univ., Turkey

2-A-10

### Long-term results of high tibial osteotomies in Ilizarov frame for the arthritic knee

Yuri Plakseychuk<sup>1</sup>, S. Vagapov<sup>1</sup>, Anton Plakseychuk<sup>2</sup>

<sup>1</sup>Tatarstan Research Center "Reconstructive Orthopaedics and Traumatology", Russia, <sup>2</sup>Dept. of Orthop. Surg., Univ. of Pittsburgh, USA

2-A-11

### Evaluation of correction accuracy and permanency of femoral axial deformity due to growth plate injury in patient treated with Ilizarov technique before end of growth

Milud Shadi, Pawel Koczewski, Marek Tomaszewski

Dept. of Paediatric Orthopaedics and Traumatology, Univ. of Med. Sciences of Poznan, Poland

Lunch

12:40 - 14:00

Poster Discussion

Room Sakura

Free Paper A-08

14:00 - 14:25

## Hip Joint in Children

Room A

Moderators: Jacques Caton, Hidehiko Kawabata

2-A-12

### Percutaneous proximal femoral osteotomy and fixation with the Ilizarov fixator in children

Mahir Gulsen, Cenk Ozkan, Mustafa Celiktas

Dept. of Orthop. Surg., Cukurova Univ., Turkey

Oct. 13 (Fri)

# SCIENTIFIC PROGRAM

## 2-A-13

### Treatment of Coxa Vara utilizing external fixator

Elhussein Mohamed Elmoatasem, Hany Mamdouh Hefny, Mootaz Foad Thakeb, Khalid Abdelghafar Alabd  
Dept. of Orthopaedics, Ain Shams Univ., Egypt

## 2-A-14

### Treatment of Legg-Calvé-Perthes disease utilizing early transphyseal tunnelling and late arthrodiastasis with an Ilizarov frame

Nuno F. Craveiro Lopes, Carolina Escalda, Carlo Villacreses  
Orthop. and Trauma Dept., Limb Lengthening and Reconstruction Unit, Garcia de Orta Hosp., Portugal

## Free Paper A-09

14:25 - 14:45

## Limb Salvage after Tumor Surgery

Room A

Moderators: Leif Pål Kristiansen, Keisuke Sakurakichi

## 2-A-15

### Limb salvage for osteosarcoma of the distal tibia with resection arthrodesis, autogenous fibular graft and Ilizarov external fixator

Sameh Shalaby, Hisham Shalaby, Ayman Bassiony  
Limb Reconstruction Unit, Dept. of Orthop. Surg., Ain Shams Univ., Egypt

## 2-A-16

### Distraction osteogenesis in management of bone defects after tumor resection

Barakat Sayed El-Alfy, Hani Mohamed El-Mowafi  
Dept. of Orthop. Surg., Mansoura Univ., Egypt

## Free Paper A-10

14:45 - 15:40

## Complications

Room A

Moderators: Vladimir I. Shevtsov, Natsuo Yasui

## 2-A-18

### Influence of distraction magnitude and other selected parameters on knee ROM during femur lengthening with Ilizarov frame

Pawel Koczewski, Dominik Lawniczak  
Dept. of Paediatric Orthopaedics and Traumatology, Univ. of Med. Sciences of Poznan, Poland

## 2-A-19

### Complications in tibial deformity correction and lengthening in children

Alexander M. Cherkashin, Mikhail Samchukov, John Birch, Eugene Limanovich  
Texas Scottish Rite Hosp. for Children, USA

## 2-A-20

### Complications of metatarsal lengthening

Hui-Wan Park, Soo-Bong Hahn, Hyun-Woo Kim  
Dept. of Orthop. Surg., Yonsei Univ., Republic of Korea

## 2-A-21

### Ilizarov circular frames and patients' tolerance -compliance levels . Is it possible to establish a patient-frame friendly relationship?

Androniki Drakou<sup>1</sup>, David Stubbs<sup>2</sup>, Martin McNally<sup>2</sup>, Maz Sunderland<sup>2</sup>, Anna Lendi<sup>1</sup>, Sandra Parker<sup>3</sup>  
<sup>1</sup>A' Orthop. Dept., Univ. of Athens, Greece, <sup>2</sup>Limb Reconstruction Term, Nuffield Orthop. Centre, <sup>3</sup>Clinical Audit Facilitator, Nuffield Orthop. Centre, UK

**2-A-22****Modified Thompson quadricepsplasty for the stiff knee after Ilizarov limb reconstruction**

Soo Bong Hahn, Hong Kyun Kim, Hyun Woo Kim, Hui Wan Park  
Dept. of Orthop. Surg., Yonsei Univ., Republic of Korea

**2-A-23****A radical approach for the late diagnosis of compartment syndrome**

Ashock Goel, Shreyash Gajjar, Kenneth Graham, Selvadurai Nayagam  
Dept. of Orthop. Surg., Royal Liverpool Children's Hosp., UK

**2-A-24****Prevention and treatment of patella baja in patients undergoing limb lengthening**

Ashish Ranade, Dror Paley  
Rubin Inst. for Advanced Orthopedics, Sinai Hosp. of Baltimore, USA

**Break**

15:40 - 16:00

**My Disastrous Case**

16:00 - 17:40

**Room A**

**Moderators: Maurizio A. Catagni, Takashi Matsushita**

**MDC-1****Infected non-union in lower-leg with massive defect of the soft tissue: a case report**

Daisuke Takahashi, Junichi Monji  
Dept. of Orthop. Surg., Sanso-kai Clark Hosp., Japan

**MDC-2****Osteomyelitis of femur with massive bone defect including femoral head**

Takashi Matsushita  
Dept. of Orthop. Surg., Teikyo Univ. School of Med., Japan

**MDC-3****Disastrous case 1, Disastrous case 2**

Maurizio A. Catagni, Francesco Guerreschi, Luigi Loviseti  
Dept. of Orthop. Surg., A. Manzoni General Hosp., Italy

**MDC-4****Congenital Limb Lengthening: How to prevent and treat disasters**

Dror Paley  
Rubin Inst. for Advanced Orthop., and International Center for Limb Lengthening, Sinai Hosp. of Baltimore, USA

**MDC-5****Posttraumatic large defect of the tibia treated by fibula widening**

Tsukasa Teramoto  
Dept. of Orthop. Surg., Nagasaki Yuai Hosp., Japan

# SCIENTIFIC PROGRAM

Free Paper B-05

12:00 - 12:45

**Spine & Pelvis**

Room B-1

Moderators: Nuno Craveiro-Lopes, Satoru Ozeki

**2-B-01**

**Transosseous osteosynthesis in the spinal Surgery**

Alexander T. Khudiaev, Vladimir I. Shevtsov, Sergey V. Lyulin

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**2-B-02**

**Operative treatment of thoracic and lumbar spine injuries**

Anatoly B. Tomilov, Evguenii V. Plachin, Kyril A. Berdyugin

Dept. of Spin Surg., Ural Scientific Reserch Instit. of Traumatology and Orthopaedics, Russia

**2-B-03**

**Severe congenital thoracic kyphoscoliosis by total correction of spondylectomy and Ilizarov external fixation**

Yoshitake Kohakura, Satoru Ozeki, Yutaka Nohara

The Dept. of Orthop. Surg., Koshigaya Hosp. Dokkyo Sch. of Med. Japan

**2-B-04**

**Management of pelvic fractures using Ilizarov technology**

Aruchamy Ramalingam

Dept. of Orthop. and Traumatology, Hosp. Bintulu, Malaysia

**2-B-05**

**External fixation in the treatment of the unstable pelvic injuries and posttraumatic deformations**

Alexey V. Rounkov, Igor L. Shlykov, Maxim V. Agalakov, Salavat G. Salavatov

Dept. of Trauma, Ural Scientific Reserch Inst. of Traumatology and Orthopaedics, Russia

**2-B-06**

**External fixation in the treatment of unstable pelvic injuries**

Konstantin C. Stelmakh

Ural Scientific Research Inst. of Traumatology and Orthopaedics, Russia

Free Paper B-06

14:00 - 14:45

**Deformity Correction**

Room B-1

Moderators: Juanito S. Javier, Wook-cheol Kim

**2-B-07**

**Use of Taylor Spatial Frame (TSF) in trauma and post traumatic reconstruction our experience at King Abdulaziz University Hospital**

Mohammed Jalal Al-Sayyad

Dept. of Orthopaedics, King Abdulaziz Univ., Saudi Arabia

**2-B-08**

**Safety of sequential closed nailing after external fixation**

Alexander N. Chelnokov, Alexander E. Vinogradsky

Dept. of Trauma, Ural Scientific Research Inst. of Traumatology and Orthopaedics, Russia

**2-B-09**

**Treatment of upper limb deformities with external fixation**

Ghassan M. Salameh<sup>1</sup>, Michael Schmidt<sup>2</sup>

<sup>1</sup>Abassen Hosp., Orthop. Dept. Syria., <sup>2</sup>Vald Hof Praxes, Orthop. Surgeon, Germany

## 2-B-10

### Deformity correction and lengthening of forearm bones in children

Alexander Kirienko

Istituto Clinico Humanitas, Italy

## 2-B-11

### Humerus varus: Corrective osteotomy and stabilization with Ilizarov fixator

John E. Herzenberg<sup>1</sup>, Avinash B. Ranade<sup>2</sup>, Dror Paley<sup>1</sup>

<sup>1</sup>Rubin Inst. for Advanced Orthopaedics., Sinai Hosp. of Baltimore, USA, <sup>2</sup>Ranade Hosp., India

## 2-B-12

### Correction bone defect

Manuel Augusto de Lemos Couto Azevedo

Orthop. Dept., H. S. João de Deus, EPE, Portugal

## Free Paper B-07

### Lengthening of the Upper Extremities

14:45 - 15:10

Room B-1

Moderators: Gerald Eliot Wozasek, Hisaya Shirai

## 2-B-13

### Clinical analysis of twice bone lengthening for radial club hands

Kiyoshi Yoshida, Hidehiko Kawabata, Tsuyoshi Tamura, Mayuko Wada, Hidefumi Shimozone, Ruiko Takagi

Dept. of Orthop. Surg., Osaka Med. Center and Research Inst. for Maternal and Child Health, Japan

## 2-B-14

### Humerus lengthening with monolateral external fixator

Milud Shadi, Pawel Koczewski

Dept. of Paediatric Orthopaedics and Traumatology, Univ. of Med. Sciences of Poznan, Poland

## 2-B-15

### Bilateral humeral lengthening in achondroplasia

Naoya Kashiwagi<sup>1</sup>, Yoichi Seto<sup>1</sup>, Koichi Yoshino<sup>1</sup>, Shigeo Suzuki<sup>2</sup>, Tohru Futami<sup>3</sup>

<sup>1</sup>Dept. of Orthop. Surg., Sky Ortho. Clinic, <sup>2</sup>Dept. of Orthop. Surg., Mizuno Hosp., <sup>3</sup>Dept. of Orthop. Surg., Shiga Med. Center for Children, Japan

## Free Paper B-08

### Poliomyelitis

15:10 - 15:40

Room B-1

Moderators: Masood Umer, Junichi Monji

## 2-B-16

### Correction of post polio residual deformities of lower limbs by Ilizarov ring fixator

Yunis H. Soomro, Mehtab Ahmed Pirwani

Dept. of Orthop. Surg. & Limb Lengthening Center, Dow Univ. of Health Sciences & Civil Hosp., Pakistan

## 2-B-17

### Role of Ilizarov surgery in elimination of hand-to-knee gait in post-polio residual paralysis

Gautam D. Shah

Centre for Trauma Surg. & Ilizarov Technique, Dr. Shah's Hosp., India



# SCIENTIFIC PROGRAM

## **2-B-18**

### **Correction of severe lower extremity post polio deformity in adolescents with Ilizarov technique**

Haroon ur Rashid, Masood Umer

Aga Khan Univ. Hosp., Pakistan

## **2-B-19**

### **Correction of genu recurvatum in poliomyelitis by the Ilizarov method**

Hany M. Hefny

Dept. of Orthop., Limb Reconstruction Unit, Ain Shams Univ., Egypt

October 14 (Sat.)

**Presidential Guest Lecture III**

8:00 - 8:30

**Dror Paley**

**Room A**

**Moderator: David William Lowenberg**

**Foot deformity correction with external fixation**

Dror Paley

Rubin Inst. for Advanced Orthop., International Center for Limb Lengthening, Sinai Hosp. of Baltimore, U.S.A.

**Free Paper A-11**

8:30 - 9:00

**New Principle I**

**Room A**

**Moderators: Hui-Wan Park, Hidehiko Kawabata**

**3-A-01**

**New atlas for pin and wire insertion on the basis of the method of unified designation of external fixation**

Leonid N. Solomin<sup>1</sup>, Roman E. Inyushin, Pavel N. Kulesh, Maxim V. Andrianov, Dmitry V. Mykalo R.R.Vreden Russian Research Inst. of Traumatology and Orthopedics, Russia

**3-A-02**

**3D animated educational module to obtain informed consent for limb lengthening**

Leo Donnan<sup>1</sup>, Christopher Harris<sup>2</sup>, Durai Nayagam<sup>2</sup>, Cheryl Dingey<sup>1</sup>

<sup>1</sup>Dept. of Orthopaedics, Royal Childrens Hosp., Australia, <sup>2</sup>Dept. of Orthopaedics, Alder Hey Children's Hosp., UK

**3-A-03**

**Multiplier method for limb length prediction in the upper extremity**

Dror Paley, Amanda Gelman, Mordchai Shualy, John E. Herzenberg

Rubin Inst. for Advanced Orthopedics, Sinai Hosp. of Baltimore, USA

**3-A-04**

**Estimating the knee joint level in young children using a tangent to the visible epiphysis - a validated and reliable technique for deformity analysis**

Ayman Ebeid, Yu Han Chee, Philippa Thorpe, Selvadurai Nayagam

Dept. of Orthop. Surg., Royal Liverpool Children's Hosp. UK

**Free Paper A-12**

9:00 - 9:30

**New Principle II**

**Room A**

**Moderators: Selvadurai Nayagam, Shigeharu Negami**

**3-A-05**

**Continuous infusion of insulin-like growth factor-I (IGF-I) into the epiphysis promotes longitudinal bone growth of the tibiae in young rabbits**

Aziz Abbaspour, Shinjiro Takata, Yoshito Matsui, Hirofumi Kosaka, Mitsuhiko Takahashi, Yoshitera Kawasaki, Shisuke Katoh, Natsuo Yasui

Dept. of Orthopedics, Inst. of Health Biosciences, Univ. of Tokushima, Japan

**3-A-06**

**Intra-medullary femoral lengthening after hip replacement - a new concept**

Peter Helmut Thaller, Rainer Baumgart, Martin Thallmair

ZEM, Limblengthening Center Munich, Germany

Oct. 13 (Fri.)

Oct. 14 (Sat.)

# SCIENTIFIC PROGRAM

## 3-A-07

### **Autogenous tibial shafts as a bone graft material**

Shigeharu Negami

Negami Orthop. Clinic, Japan

## 3-A-08

### **Revascularization of lower limbs using osteosynthesis techniques in ischemic type of diabetic foot**

Vadim D. Dmitriev, Vladimir I. Shevtsov, Y. N. Schurova, Vladimir A. Shchurov

Russian Ilizarov Scientific Center "Restorative Traumatology and Orthopaedics", Russia

## **Free Paper A-13**

9:30 - 10:00

## **Bone Transport**

Room A

**Moderators: Manuel Azevedo, Yoshiteru Kawasaki**

## 3-A-09

### **Limb salvage in mangled extremities -Patient's view**

Gerald Eliot Wozasek, Fritz Kutscha-Lissberg, Manfred Greitbauer

Dept. of Traumatology, Univ. of Vienna, Austria

## 3-A-10

### **A comparison of techniques for dealing with the docking site of bone transport**

Nikolas Giotakis, Badri Narayan, Selvadurai Nayagam

Royal Liverpool Univ. Hosp., UK

## 3-A-11

### **Filling in bone defects by polyfocal lengthening of fragments**

Vladimir I. Shevtsov, Dmitry J. Borzunov, Natalia V. Petrovskaya

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

## 3-A-12

### **Bone transport over the intramedullary nail for long bone defect**

Chang-Wug Oh<sup>1</sup>, Jong-Keon Oh<sup>2</sup>, Jae-Young Roh<sup>3</sup>, Hae-Ryong Song<sup>4</sup>

<sup>1</sup>Dept. of Orthop. Surg. Kyungpook Nat'l Univ., <sup>2</sup>Dept. of Orthop. Surg. Ewha Woman's Univ., <sup>3</sup>Dept. of Orthop. Surg., Nat'l Med. Center, <sup>4</sup>Dept. of Orthop. Surg., Korea Univ., Republic of Korea

## **Break**

10:00 - 10:20

## **Instructional Course Lecture IX**

10:20 - 10:40

## **Michael Weber**

Room A

### **Weber-Cable-Technique-Versatility of an elegant technique -**

Michael Weber

Center for Limb Reconstruction and Limb Lengthening, Univ. Hosp. of the RWTH Aachen, Germany

## Instructional Course Lecture X

10:40 - 11:00

### Robert Rödl

Room A

#### Intramedullary lengthening with the ISKD

Robert Rödl

Dept. of Orthopaedics, Univ. Hosp. of Münster, Germany

## Free Paper A-14

11:00 - 11:45

### Infected Non Union I

Room A

**Moderators:** Mohamed Mahmoud Fadel, Takano Nakase

#### 3-A-13

##### Non union of the femur -treatment by Fix AS

Nedžad Sabic, M. Habul, E. Sabic

ZENICA, Bosnia & Herzegovina

#### 3-A-14

##### Use of the Ilizarov technique for treatment of non-union of the tibia associated with infection

Dimitris L. Katsenis, Antonis K. Kouris, Nikos K. Schoinochoritis, Savas J. Kontos, Kostas S. Pogiatzis, George K. Dendrinis

Argos General Hosp., Greece

#### 3-A-15

##### An alternative method for the treatment of tibia non-union with bone loss

Cengiz Sen<sup>1</sup>, Levent Eralp<sup>2</sup>, Taner Gunes<sup>1</sup>, Mehmet Erdem<sup>1</sup>, Vahit Emre Ozden<sup>2</sup>, Mehmet Kocaoglu<sup>2</sup>, Bora Bostan<sup>1</sup>

<sup>1</sup>Dept. of Orthopaedics and Traumatology, Gaziosmanpasa Univ., <sup>2</sup>Dept. of Orthopaedics and Traumatology, Istanbul Univ., Istanbul Med. Fac., Turkey

#### 3-A-16

##### Management of infected non union tibia by Ilizarov fixator

Yunis H. Soomro, Zameer Ahmed Soomro

Dept. of Orthopaedics, Dow Univ. of Health Sciences, Pakistan

#### 3-A-17

##### The treatment of infected distal tibial nonunion with bone loss with Ilizarov fixator

Elias Lambiris, Alkis Saridis, Minos Tyllianakis, Elias Panagiotopoulos, Charalambos Matzaroglou

Orthop. Dept., Univ. of Patras, Greece

#### 3-A-18

##### Ilizarov management of infected non union of the lower limb: effect of none union site preparation on healing time

Hatem Ahmed Kotb<sup>1</sup>, Khaled Mohammed Abdel Halim<sup>2</sup>, Hatem A.R.A. Sharaf El-Din<sup>3</sup>

<sup>1</sup>Dept. of Orthop. Surg., Fayoum Univ., <sup>2</sup>Dept. of Orthop. Surg., Cairo Univ., <sup>3</sup>Dept. of Orthop. Surg., Inst. of Neuromotor System, Egypt

# SCIENTIFIC PROGRAM

Free Paper A-15

11:45 - 12:40

## Infected Non Union II

Room A

Moderators: Yunis H. Soomro, Satoru Ozeki

### 3-A-19

#### Classification and treatment of infected nonunion, a preliminary suggested classification

Adel E. Khamis<sup>1</sup>, Gamal Ahmed Hosny<sup>2</sup>, Mohamed Mahmoud Fadel<sup>3</sup>

<sup>1</sup>Dept. of Orthop. Surg., Egyptian Military Hosp., <sup>2</sup>Dept. of Orthop. Surg., Benha Univ., <sup>3</sup>Dept. of Orthop. Surg., El-Minia Univ., Egypt

### 3-A-20

#### Infected nonunion humerus, the option of Ilizarov external fixation

Mohamed Fadel<sup>1</sup>, Gamal Hosny<sup>2</sup>

<sup>1</sup>Dept. of Orthop. Surg., El-Minia Univ., <sup>2</sup>Dept. of Orthop. Surg., Benha Univ., Egypt

### 3-A-21

#### Ilizarov method as a salvage procedure in infected shotgun fractures of long bones

Antonis Kouzelis, Alkis Saridis, Panagiotis Megas, Charalambos Matzaroglou, Elias Lambiris

Dept. of Orthopaedics, Univ. of Patras, Greece

### 3-A-22

#### Treatment of the septic nonunion with the ilizarov's method

Sergio Iriarte

Dept. de Ortop. Y Traumatología, Univ. Mayor de San Andres, Bolivia

### 3-A-23

#### Management of infected non-unions of tibia with ilizarov's fixator

Hariram R. Jhunjhunwala

Bombay Hosp. & Med. Research Centre Marine Lines, India

### 3-A-24

#### Infected nonunion in children

Gamal Ahmed Hosny<sup>1</sup>, Mohamed Mahmoud Fadel<sup>2</sup>

<sup>1</sup>Benha Univ., <sup>2</sup>Minia Univ., Egypt

### 3-A-25

#### Which is superior in treatment of difficult cases, Ilizarov methods or microsurgery?

Yoshiki Yamano, Hideki Sakanaka, Hiroyuki Gotani

Microsurgery Center, Seikeikai Hosp., Japan

Current Topics II

12:40 - 13:10

## From Basic to Clinical Perspective: Nerve Lengthening

Room A

Moderator: Naoyuki Ochiai

### CT2-1

#### Reaction of nerve trunks in limb lengthening

Vladimir I. Shevtsov

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

### CT2-2

#### Gradual lengthening of peripheral nerve in rat

Naoyuki Ochiai, Yasumasa Nishiura, Ichiro Abe, Yuki Hara, Saijilafu

Dept. of Orthop. Surg., Inst. of Clinical Med. Graduate Sch. of Comprehensive Human Sciences Univ. of Tsukuba, Japan

**Lunch**

13:10 - 14:00

**Room Sakura**

**Free Paper A-16**

14:00 - 14:40

**Tibia Fracture**

**Room A**

**Moderators:** Hariram R. Jhunjhunwala, Hiroyuki Tsuchiya

**3-A-26**

**Tibial fractures in children-factors which influence healing**

Ashim Wokhlu, Daniel Brown, Selvadurai Nayagam  
Dept. of Orthop. Surg., Royal Liverpool Children's Hosp., UK

**3-A-27**

**Treatment of traumatic floating knee by ligamentotaxis utilizing Ilizarov external fixator**

Mahmoud Mohamed Fayed  
Dept. of Orthop. Surg., Ain Shams Univ., Egypt

**3-A-28**

**Extra-articular fractures of the distal tibia treated using circular external fixation**

Christian Harris, Selvadurai Nayagam, Badri Narayan  
Dept. of Orthopaedics, Royal Liverpool Univ. Hosp., UK

**3-A-29**

**Nailing in metaphyseal fractures of the tibia - Ilizarov-based approach**

Alexander N. Chelnokov, Dmitry A. Bekreev  
Dept. of Trauma, Ural Scientific Reserch Inst. of Traumatology and Orthopaedics, Ekaterinburg, Russia

**3-A-30**

**Treatment of tibial shaft fractures with the Taylor Spatial Frame**

James C. Binski, Brian Hutchinson  
Dept. of Orthop. Surg., Wright State Univ., U.S.A.

**Symposium III**

14:40 - 16:00

**Current Trends of Taylor Spatial Frame**

**Room A**

**Moderators:** Yasser A. Elbatrawy, Hiroyuki Tsuchiya

**S3-1**

**Management of nonunion of the femoral shaft using Ilizarov principles**

Mohamed Fadel<sup>1</sup>, Gamal Ahmed Hosny<sup>2</sup>, Hatem Kotb<sup>3</sup>  
<sup>1</sup>Dept. of Orthop. Surg., El-Minia Univ., <sup>2</sup>Dept. of Orthop. Surg., Benha Univ., <sup>3</sup>Dept. of Orthop. Surg., Elfayom Univ., Egypt

**S3-2**

**The role of the Taylor Spatial Frame in revision high tibial osteotomy Surgery**

Kevin William Louie, David William Lowenberg  
Univ. of California San Francisco, USA

# SCIENTIFIC PROGRAM

## S3-3

### **Correction of deformities in children using the Taylor Spatial Frame**

Mark Eidelman, Viktor Bialik, Alexander Katzman  
Pediatric Orthopedics Unit, Rambam Med. Center, Israel

## S3-4

### **Application of Taylor Spatial Frame for foot & ankle & upper extremity**

James C. Binski  
Dept. of Orthop. Surg., Wright State Univ. S. O. M., U.S.A.

**Closing Ceremony**

16:00 - 16:20

**Takashi Matsushita**

**Room A**

President of 4th Meeting of A.S.A.M.I. International  
President of A.S.A.M.I. International

Free Paper B-09

8:40 - 9:30

Foot & Ankle

Room B-1

Moderators: Carlos Pareja, Tsukasa Teramoto

**3-B-01**

**Early correction of clubfeet before walking age using Ilizarov small bone system**

Toshio Kitano, Yuki Imai, Keisuke Nakagawa, Mitsuaki Morita, Kunio Takaoka

Dept. of Orthop. Surg., Osaka City Univ., Japan

**3-B-02**

**Analysis of recurrence in the treatment resistant clubfoot**

Jochen Fischer, Manish Changulani, Rose Davies, Selvadurai Nayagam

Dept. of Orthop. Surg., Royal Liverpool Children's Hosp., UK

**3-B-03**

**Treatment of relapsed idiopathic clubfoot by complete subtalar release combined with the Ilizarov method - A long-term results -**

Takanobu Nakase<sup>1</sup>, Natsuo Yasui<sup>2</sup>, Nobuyuki Shimizu<sup>3</sup>, Motohiro Kitano<sup>4</sup>, Kazuo Hiroshima<sup>4</sup>, Hideo Kawai<sup>1</sup>, Hideki Yoshikawa<sup>3</sup>

<sup>1</sup>Dept. of Orthop. Surg., Hoshigaokakoseinenkin Hosp., <sup>2</sup>Dept. of Orthop. Surg., Tokushima Univ. Sch. of Med., <sup>3</sup>Dept. of Orthop. Surg., Osaka Univ. Med. Sch., <sup>4</sup>Dept. of Orthop. Surg., Osaka Nat'l Hosp., Japan

**3-B-04**

**Cavus foot, closed and open treatment with Ilizarov**

Alexander Kirienko<sup>1</sup>, Nicola Portinaro<sup>2</sup>

<sup>1</sup>Istituto Clinico Humanitas, <sup>2</sup>Univ. dei Studi di Milano, Italy

**3-B-05**

**The use of Ilizarov technique in treatment of complex foot deformities**

Mahmoud Mohamed Fayed

Dept. of Orthop. Surg., Ain Shams Univ., Egypt

**3-B-06**

**Treatment of congenital and acquired foot deformities with external fixations**

Ghassan M. Salameh<sup>1</sup>, Michael Schmidt<sup>2</sup>

<sup>1</sup>Abassen Hosp., Orthop. Dept. Syria, <sup>2</sup>Vald Hof Praxes, Orthop. Dept., Germany

Free Paper B-10

9:30 - 10:00

Ankle Arthrodesis

Room B-1

Moderators: Elias Panagiotopoulos, Junichi Monji

**3-B-07**

**Ankle fusion in tibial bone loss with Ilizarov technique**

Cherian Kovoov<sup>1</sup>, V.V. George<sup>2</sup>, Vinod Padmanabhan<sup>3</sup>, Sabin Viswanath<sup>3</sup>, Deepu Bhasker<sup>3</sup>

<sup>1</sup>Eranakulam Med. Centre and Specialist's Hosp., <sup>2</sup>Eranakulam Med. Centre, <sup>3</sup>Specialist's Hosp., India

**3-B-08**

**Ankle arthrodesis in Ilizarov frame: experience of 25 years**

Yuri Plakseychuk<sup>1</sup>, Anton Plakseychuk<sup>2</sup>, Ramil Salihov<sup>1</sup>

<sup>1</sup>Tatarstan Research Center "Reconstructive Orthopaedics and Traumatology", Russia, <sup>2</sup>Dept. of Orthop. Surg., Univ. of Pittsburgh, USA



# SCIENTIFIC PROGRAM

## 3-B-09

### **Arthrodesis of the foot: distraction before or after Surgery?**

Alexander Kirienko<sup>1</sup>, Massimo De Donato<sup>1</sup>, Valerio Sansone<sup>2</sup>

<sup>1</sup>Inst. Clinico Humanitas, <sup>2</sup>Univ. dei Studi di Milano, Italy

## 3-B-10

### **Ankle arthrodesis with the Ilizarov apparatus**

Yrii Plakseychuk<sup>1</sup>, Anton Plakseychuk<sup>2</sup>, Ramil Salihov<sup>1</sup>,

<sup>1</sup>Tatarstan Research Center, "Reconstructive Orthopaedics and Traumatology", Russia, <sup>2</sup>Univ. of Pittsburgh Med. Center, USA

## Free Paper B-11

11:05 - 11:45

## Intramedullary Lengthening

Room B-1

**Moderators: Robert Rödl, Hiroshi Okazaki**

## 3-B-11

### **The results of leg lengthening by Ilizarov method versus gradual elongation intramedullary nail**

Soo Bong Hahn, Hong Kyun Kim, Hyun Woo Kim, Hui Wan Park

Dept. of Orthop. Surg., Yonsei Univ., Republic of Korea

## 3-B-12

### **Femoral nailing of fractures after lengthening for congenital femoral deficiency in young children**

John E. Herzenberg<sup>1</sup>, Dror Paley<sup>1</sup>, Toby Branfoot<sup>2</sup>, F. Violante<sup>3</sup>

<sup>1</sup>Rubin Inst. for Advanced Orthopedics, Sinai Hosp. of Baltimore, USA, <sup>2</sup>St. James's Univ. Hosp., UK, <sup>3</sup>Dept. of Orthop. Surg., Associcao de Assistencia à Crianca Deficiente, Brazil

## 3-B-13

### **Femoral lengthening with the ISKD: The effect on mechanical axis deviation**

Dror Paley<sup>1</sup>, Rolf D. Burghard<sup>2</sup>, John E. Herzenberg<sup>1</sup>, Ashish Ranade<sup>1</sup>

<sup>1</sup>Rubin Inst. for Advanced Orthopedics, Sinai Hosp. of Baltimore, USA, <sup>2</sup>Univ. of Munich, Germany

## 3-B-14

### **Results of limb lengthening using internal method (fitbone)**

Sarbjit Singh Singh, Amitabha Kanta Lahiri, Muhammad Iqbal Iqbal

Singapore

## 3-B-15

### **Limb lengthening and deformity correction with the fully implantable, programmable Fibone-System -first results of 250 cases-**

Rainer Baumgart, Peter Thaller, Martin Thallmair

ZEM - Limb Lengthening Center Munich, Germany

## Free Paper B-12

11:45 - 12:35

## New Device

Room B-1

**Moderators: Kevin W. Louie, Nobuyuki Takenaka**

## 3-B-16

### **Principles of deformities correction using hexapode fixator**

Walter Targa, Tassilo Mader, Paulo R. Reis, Rodrigues L. Franklin

Dept. of Orthop. Surg., Univ. São Paulo, Dept. of Orthop. Surg., OrtoCenter, Brazil

## 3-B-17

### **A new hinge system in the treatment of limb lengthening and axial deviations**

Ghassan M. Salameh<sup>1</sup>, Michael Schmidt<sup>2</sup>

<sup>1</sup>Orthop. Dept., Abassen Hosp., Syria., <sup>2</sup>Orthop. Surgeon, Vald Hof Praxes, Germany

**3-B-18****The requirements for optimal application of hybrid (combined) external fixation**

Leonid N. Solomin

R.R.Vreden Russian Research Inst. of Traumatology and Orthopedics, Russia

**3-B-19****The “module transformation” of external fixation devices**

Leonid N. Solomin, Vladimir A. Nazarov, Maxim V. Andrianov, Pavel N. Kulesh, Roman E. Injushin, Dmitry A. Mikalo

R.R.Vreden Russian Research Inst. of Traumatology and Orthopedics, Russia

**3-B-20****Our experience of application of the hexapod Ilizarov external fixator**

Jacob A. Odessky

Dept. of Orthop. Surg., Assaf Harofeh Med. Center, Israel

**3-B-21****Titanium dioxide photocatalytic material for prevention of pin tract infection**Yoshinobu Oka, Wook-Cheol Kim, Yuichi Tsuchida, Kouei Kawamoto, Takashi Yoshida, Toshikazu Kubo  
Dept. of Orthopaedics, Graduate Sch. of Med. Science, Kyoto Prefectural Univ. of Med., Japan**3-B-22****Correction of multi-plane deformities using a unilateral external fixator with a universal bar link system**Isao Ohnishi, Takuya Matsumoto, Juntaro Matsuyama, Satoru Ohashi, Masahiko Bessho, Koza Nakamura  
Dept. of Orthop. Surg., Univ. of Tokyo, Japan**Free Paper B-13**

14:00 - 14:35

**Shoulder Girdle & Hand****Room B-1****Moderators: Sergio Iriarte, Hisaya Shirai****3-B-23****External fixation in the treatment of acromioclavicular joint dislocations**

Alexander N. Chelnokov, Alexander P. Kim

Dept. of Trauma, Ural Scientific Reserch Inst. of Traumatology and Orthopaedics, Russia

**3-B-24****Ilizarov external fixator for the distal clavicular fracture**Kazutaka Otsuka<sup>1</sup>, Tsukasa Teramoto<sup>2</sup>, Yoshiaki Makino<sup>3</sup>, Koichiro Tashiro<sup>4</sup><sup>1</sup>Dept. of Orthop. Surg., Omura Municipal Hosp., <sup>2</sup>Dept. of Orthop. Surg., Nagasaki Friendship Hosp., <sup>3</sup>Dept. of Orthop. Surg., Sasebo General Hosp., <sup>4</sup>Dept. of Orthop. Surg., Nagasaki Memorial Hosp., Japan**3-B-25****External fixation of the hand bones fractures and false joints**

Oleg V. Beydik, Alexandr V. Zaretskov

Saratov State Med. Univ., Russia.

**3-B-26****The possibilities of Ilizarov frame application in hand trauma**

Natalia G. Shikhaleva, Vladimir I. Shevtsov, Mikhail Y. Danilkin, Denis A. Shabalin

Russian Ilizarov Scientific Center “Restorative Traumatology and Orthopaedics”, Russia

**3-B-27****Application of osteosynthesis for treatment of hand orthopedic diseases (2002-2006)**Huseyn. Ali Ismailov<sup>1</sup>, Maryam Eslami<sup>2</sup><sup>1</sup>Monopoly Representative of Ilizarov Scientific Center, <sup>2</sup>Med. Azad Univ. of Tehrany, Iran & Middle East

October 12 (Thu.), 13(Fri.)

**Poster Session****Discussion for Poster Presentation:****October 12 (Thu.) 12:00-13:15 for posters with odd numbers****October 13 (Fri.) 12:45-14:00 for posters with even numbers****Authors are responsible to be in front of their posters and to handle questions during discussion period.****P001****The role of crusts in Ilizarov fixator pinsite care**Simon Britten, Ali Ghaz, Mohamed Abou-Shameh, Bev Duffield  
Dept. of Orthopaedics, St. James's Univ. Hosp., UK**P002****Results of height increasing surgeries by LON method at 140 cases (280 tibias)**Nader Motallebizadeh<sup>1</sup>, Ashraf Karbasi<sup>2</sup>, Sedigheh Ostadrahimi<sup>3</sup>  
<sup>1</sup>Limb Lengthening Center of Iran (LLCI), <sup>2</sup>Baghiatallah Hosp., <sup>3</sup>BS-LLCI, Iran**P003****The difference between declared and actual stature**Alexia Marinou<sup>1</sup>, Ippokratis Hatzokos<sup>1</sup>, Anastasia Beka<sup>2</sup>, Marios Markovitis<sup>2</sup>, John D. Pournaras<sup>1</sup>  
<sup>1</sup>1st Orthop. Dept., Aristotle Univ., <sup>2</sup>Psychiatric Dept. for Children and Adolescents, General Hosp. "G. Papanikolaou", Greece**P004****Ilizarov circular frames and patients' tolerance -compliance levels. Is it possible to establish a patient-frame friendly relationship?**Androniki Drakou<sup>1</sup>, David Stubbs<sup>2</sup>, Martin McNally<sup>2</sup>, Maz Sunderland<sup>2</sup>, Anna Lenti<sup>1</sup>, Sandra Parker<sup>3</sup>  
<sup>1</sup>A' Orthop. Dept., Univ. of Athens, Greece, <sup>2</sup>Limb Reconstruction Team, Nuffield Orthop. Centre, <sup>3</sup>Clinical Audit Facilitator, Nuffield Orthop. Centre, UK**P005****Apparatus-surgical treatment posttraumatic contraction in capital joint**U.S. Asilova, U.M. Asilova, A.D. Erimbetov  
Fac. traumatology-Orthopedics of the Tashkent Med. Academy, Republic of Uzbekistan**P006****Treatment of knee contractions and deformities with external fixation**Ghassan M. Salameh<sup>1</sup>, Michael Schmidt<sup>2</sup>  
<sup>1</sup>Abassen Hosp., Orthop. Dept., Syria., <sup>2</sup>Vald Hof Praxes, Orthop. Surgeon, Germany**P007****Plasty of knee extension apparatus in the treatment of "extension contracture" after femoral lengthening**Pawel Koczewski, Milud Shadi  
Dept. of Paediatric Orthopaedics and Traumatology, Univ. of Med. Sciences of Poznan, Poland**P008****Total tibial loss- successful multistage lengthening with Ilizarov frame and Huntington procedure**Cherry Cherian Kovoov, V.V. George, Hitesh Gopal  
Dept. of Orthop. -Eranakulam Med. Centre, India**P009****Correction of tibial deformity in Paget disease using Taylor Spatial Frame**Tsaridis Efstathios, Sarikloglou Savas, Pappasoulis Efthimios, Lykoudis Savas, Kutrubas Ioanis, Evaggelidis Dimosthenis, Avtzakis Vasilios  
Dept. of Orthop. Surg., General Hosp. of Kavala, Greece

**P010**

**Comparison of external fixators in limb lengthening**

Hidenori Matsubara, Hiroyuki Tsuchiya, Keisuke Sakurakichi, Teruhisa Yamashiro, Koji Watanabe, Kei Takato, Katsuro Tomita

Dept. of Orthop. Surg., Kanazawa Univ., Japan

**P011**

**Restoration of fingers of a brush by a distraction method hand and fingers of a brush**

U.S. Asilova, U.M. Asilova, Z.N. Nazarova, T.F. Sharipova

Fac. Traumatology-Orthopedics of the Tashkent Med. Academy of Uzbekistan, Republic of Uzbekistan

**P012**

**Usage of mini-fixator of Ilizarov in finger's reimplantation and revascularization**

Natalia G. Shikhaleva, Vladimir I. Shevtsov, Natalia A. Shchudlo

Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics", Russia

**P013**

**Toxic shock syndrome as a complication of joint mobilization under general anesthesia in a patient having external fixators. A case report**

Ramadan Oke<sup>1</sup>, Bilal Demir<sup>1</sup>, Kerem Aydin<sup>1</sup>, Senol Yazici<sup>2</sup>, Aytekin Aktan<sup>3</sup>, Vedat Sahin<sup>1</sup>

<sup>1</sup>Dept. of Orthopaedics and Traumatology, Baltalimani Hosp. for Bone Diseases, <sup>2</sup>Dept. of Anesthesiology, Baltalimani Hosp. for Bone Diseases, <sup>3</sup>Intensive Care Unit, Ozel Istanbul Gaziosmanpasa Hosp., Turkey

**P014**

**Plate fixation in humeral nonunion**

Stephanie Arbes, Gerald Eliot Wozasek, Vilmos Vecsei

Dept. of Traumatology, Univ. of Vienna Med. Sch., Austria

**P015**

**Knee arthrodesis after infected total knee arthroplasty with "custom made" unilateral external fixator**

Ibrahim Tuncay, Nazim Karalezli, Faik Turkmen

Dept. of Orthopaedics & Traumatology, Selcuk Univ., Meram Sch. of Med., Turkey

**016**

**Elevation of unilateral plateau of the tibia for genu valgum or varum deformities**

Tatsuhiro Ochiai, Yuko Takahashi, Kazumi Sato, Hideaki Suda, Akira Morone

Dept. of Pediatric Orthopedics, Takuto Rehabilitation Center for Children, Japan

**P017**

**Surgical method for repair of severe pectus excavatum by gradual correction in Ilizarov apparatus**

Anton Plakseychuk<sup>1</sup>, Yuri Plakseychuk<sup>2</sup>, Ravil Habibynov<sup>2</sup>

<sup>1</sup>Dept. of Orthop. Surg., Univ. of Pittsburgh, USA <sup>2</sup>Tatarstan Research Center "Reconstructive Orthopaedics and Traumatology", Russia

**P018**

**A new method for evaluation of the consolidation of lengthened callus by echo tracking**

Juntaro Matsuyama<sup>1</sup>, Isao Ohnishi<sup>1</sup>, Ryoichi Sakai<sup>2</sup>, Hiroyuki Suzuki<sup>2</sup>, Akimitu Harada<sup>2</sup>, Masahiko Bessho<sup>1</sup>, Takuya Matsumoto<sup>1</sup>, Hiroshi Okazaki<sup>3</sup>, Wakyo Sato<sup>3</sup>, Kozo Nakamura<sup>1</sup>

<sup>1</sup>Dept. of Orthop. Surg., Tokyo Univ., <sup>2</sup>Research Laboratory, Aloka Co., Ltd., <sup>3</sup>Dept. of Orthop. Surg. and Rehabilitation, Fuchu Hosp., Japan

**P019****Convenient method for a desk top planning of deformity correction using Taylor Spatial Frame -A virtual fragment method-**

Takanobu Nakase<sup>1</sup>, Nobuyuki Shimizu<sup>2</sup>, Ikko Ohno<sup>3</sup>, Chikahisa Higuchi<sup>2</sup>, Motohiro Kitano<sup>4</sup>, Hideo Kawai<sup>1</sup>, Hideki Yoshikawa<sup>2</sup>

<sup>1</sup>Dept. of Orthop. Surg., Hoshigaokakoseinenkin Hosp., <sup>2</sup>Dept. of Orthop. Surg., Osaka Univ. Med. Sch., <sup>3</sup>Dept. of Orthop. Surg., Osaka Seninhoken Hosp., <sup>4</sup>Dept. of Orthop. Surg., Osaka Nat'l Hosp., Japan

**P020****Below the ankle circular fixator. A new device for the treatment of displaced intrarticular calcaneal fractures**

Konstantinos A. Bargiotas, Konstantinos N. Malizos, Apostolos Dimitroulias, Loukia Papatheodorou, Michael Hantes

Orthop. Dept., Univ. of Thessalia, Greece

**P021****Bone lengthening and deformity correction using the Taylor Spatial Frame**

Ippokratis Hatzokos, Eirini K. Iosifidou, Eleni Balabanidou, Lambros Pappas, John D. Pournaras

1st Orthop. Dept., Aristotle Univ., Greece

**P022****Bone electrical impedance of the fractured tibia in an experimental external fixation model**

Takashi Yoshida, Wook-Cheol Kim, Koei Kawamoto, Motoo Hosokawa, Yuichi Tsuchida, Toshiko Hirashima, Yoshinobu Oka, Toshikazu Kubo

Dept. of Orthopaedics, Graduate Sch. of Med. Science, Kyoto Prefectural Univ. of Med., Japan

**P023****External fixation in periprosthetic fractures: expansion of the method opportunities**

Leonid N. Solomin, Viktor A. Vilensky

R.R.Vreden Russian Research Inst. of Traumatology and Orthopedics, Russia

**P024****A novel internal bone transport technique for the treatment of large bone defects: bone only transport method**

Bilal Demir, Ramadan Oke, Kahraman Ozturk, Sarper Gursu, Kerem Aydin, Timur Yildirim, Vedat Sahin Baltalimani Metin Sabanci Bone and Joint Disease Education and Research Hosp., Turkey

**P025****A new reduction technique in the treatment of displaced long bone fractures using circular fixator: "three dimensional double hinges method"**

Bilal Demir, Ramadan Oke, Kahraman Ozturk, Kerem Aydin, Sarper Gursu, Timur Yildirim, Vedat Sahin Baltalimani Metin Sabanci Training and Research Hosp. for Bone Diseases, Turkey

**P026****Treatment of late neglected adult congenital dislocation of the hip with hybrid Ilizarov/monolateral distractor and total hip replacement. A new methodology**

Carolina L. Escalda

Orthop. and Trauma Dept., Garcia de Orta Hosp., Portugal

**P027****Triplanar correction of post traumatic cubitus varus with a mono-lateral external fixator. A new technique**

Carolina L. Escalda, Nuno F. Craveiro-Lopes, Carlo Villacreses

Orthop. and Trauma Dept., Garcia de Orta Hosp., Portugal



**P028**

**New computer-assisted devices for active and passive bone fragment reduction (preliminary report)**

Leonid N. Solomin<sup>1</sup>, Alexandr I. Utekhin<sup>1</sup>, Egor V. Isajev<sup>2</sup>, Viktor A. Vilensky<sup>3</sup>

<sup>1</sup>R.R.Vreden Russian Research Inst. of Traumatology and Orthopedics, <sup>2</sup>ZAO, <sup>3</sup>Central Research and Design Inst. of Robotics and Technical Cybernetics, Russia

**P029**

**New scoring system in treatment of Charcot ankle utilising Ilizarov method**

Mahmoud Mohamed Fayed

Dept. of Orthop. Surg., Ain Shams Univ., Egypt

**P030**

**There are no boundaries in using devices of external fixation in the treatment of musculo-skeletal system**

Gennadii P. Kotelnikov, Sergei N. Izmalkov, Yurii V. Lartzev

Samara State Med. Univ., Russia

**P031**

**Treatment of patellofemoral osteoarthritis without total patellectomy or plaster fixation: II**

Mohamed Sami Elzahaar

Dept. of Orthop. Surg., Benha Fac. of Med., Egypt

**P032**

**Case of lower end humerus bone loss- successful functional outcome with Ilizarov bone transport**

Cherry Cherian Kovoov, V.V. George, Hithesh Gopal, Sabin Viswanath, Vinod Padmanabhan

Dept. of Orthopaedics, Specialist Hospital, India

**P033**

**A murine model of distraction osteogenesis - a new devise for apparatus fixation**

Daisuke Nozawa<sup>1</sup>, Kouzou Kobayashi<sup>2</sup>, Tomoo Ishii<sup>1</sup>, Naoyuki Ochiai<sup>1</sup>

<sup>1</sup>Dept. of Orthop. Surg., Graduate Sch. of Comprehensive Human Sciences, Univ. of Tsukuba, <sup>2</sup>Med. Branch, Academic Service Office for Comprehensive Human Sciences, Univ. of Tsukuba, Japan

**P034**

**Distraction osteogenesis - novel opportunity for studying regeneration in mammals and human**

Arthur V. Osipenko, Alexander I. Reutov

Ural Scientific Research Inst. of Traumatology and Orthopaedics, Russia

**P035**

**Comparative MYO22 gene expression in different skeletal muscles after limb lengthening**

Mikhail Samchukov, Marina Makarov, Nora Elmonoufy, Carol Wise, John Birch

Texas Scottish Rite Hosp. for Children, USA

**P036**

**A prospective randomised trial comparing two established methods of pin site cleaning with Ilizarov surgery**

Maria Vincent<sup>1</sup>, Simon Royston<sup>1</sup>, Mick Dennison<sup>1</sup>, Simon Britten<sup>2</sup>

<sup>1</sup>Dept. of Orthop. Surg., Northern General Hosp., <sup>2</sup>Dept. of Orthop. Surg., St. James Univ. Hosp., UK

**P037**

**The influence of acupuncture (reflex therapy) on distraction osteogenesis in shank lengthening on rabbits**

Leonid N. Solomin, Oleg A. Jachnij, Oleg V. Shugaev, Larisa O. Anisimova

R.R.Vreden Russian Research Inst. of Traumatology and Orthopedics, Russia

**P038**

**Demineralized bone matrix and hydroxyapatite/tri-calcium phosphate mixture for bone healing in rats**

Ali Ozturk, Haluk Yetkin, Leyla Memis, Erdal Cila, Selcuk Bolukbasi, Can Gemalmaz

<sup>1</sup>Dept. of Orthopaedics, Gazi Univ., <sup>2</sup>Dept. of Pathology, Gazi Univ., Turkey

**P039****Experimental research on the possibility of optimizing of reparative osteogenesis in tube bone breaks**

Oleg V. Beydik, Kristina K. Levchenko, Alexandr V. Zaretskov, Wan Kwai  
Saratov State Med. Univ., Russia

**P040****Internal fixation removed or not? ( 2 cases report )**

Bahtiyar Demiralp, Ersin Taşatan, Mustafa Kürklü, Mustafa Başbozkurt, Ali Sabri Ateşalp  
Dept. of Orthop. and Traumatology Gulhane Military Med. Academy, Turkey

**P041****Preliminary results for limb reconstruction procedures in congenital femoral deficiencies**

Yehia AbdAllah Rady  
Dept. of Orthop. Surg., Nat'l Med. Inst. in Damanshour, Egypt

**P042****Outcome of pelvic support osteotomy combined with simultaneous femoral lengthening with the use of the Ilizarov method for the late sequelae of infantile hip infection**

Slawomir Zacha, Maciej Kolban, Marek Chilarski, Michal Chmielnicki  
Clinic of Children Orthopedics Szczecin, Poland

**P043****Congenital transverse deficiency of the tibia and fibula: a disastrous case**

Yoshihito Kawasaki, Aziz Abbas Pour, Takamitsu Takahashi, Natsuo Yasui  
Dept. of Orthopedics, The Univ. of Tokushima Graduate Sch., Inst. of Health Biosciences, Japan

**P044****The treatment of congenital pseudoarthrosis of the tibia**

Krzysztof Krauze, Wojciech Marczyński, Krystyna Stepien  
Dept. of Orthopaedics and Traumatology, Military Inst. of the Health Services, Poland

**P045****Design of Ilizarov apparatus permitting simultaneous and independent clubfoot correction**

Lev Lapidus, Jakob Odesky, Leonel Copeliovich  
Dept. of Pediatric Orthop. Surg., Assaf Harofeh Med. Center, Israel

**P046****Clinical outcome of calf lengthening with the Ilizarov apparatus for the treatment of spastic equinus ankle deformity**

Rainer Biedermann<sup>1</sup>, J. Lair<sup>1</sup>, C. Bach<sup>1</sup>, S. Frischhut<sup>1</sup>, G. Kaufmann<sup>1</sup>, Leo Donnan<sup>2</sup>  
<sup>1</sup>Dept. of Orthopaedics, Innsbruck Med. Univ., Austria, <sup>2</sup>Dept. of Orthopaedics, Royal Childrens Hosp., Australia

**P047****Management of knee flexion contractures in arthrogryposis using Ilizarov distraction technique and soft tissue procedure**

Hiroyuki Kaneko<sup>1</sup>, Senichi Tomizawa<sup>2</sup>, Atsushi Hasegawa<sup>3</sup>  
<sup>1</sup>Dept. of Orthop. Surg., Imai Hosp., <sup>2</sup>Dept. of Orthop. Surg., Gunma Children's Med. Center, <sup>3</sup>Dept. of Orthop. Surg., Higashimaebashi Orthop. Clinic, Japan

**P048****The treatment of a v-shaped deformity in the sagittal plane developing after knee arthrodesis in a child: a case report**

Bilal Demir, Ramadan Oke, Kahraman Ozturk, Kerem Aydin, Sarper Gursu, Ahmet Sukru Mercan, Vedat Sahin  
Baltalimani Metin Sabanci Bone and Joint Diseases Education and Research Hosp., Turkey

**P049**

**External fixation in the treatment of the children with trauma and orthopaedics pathology**

Oleg V. Beydik, Kristina K. Levchenko, Levon O. Sarkisyan  
Saratov State Med. Univ., Russia

**P050**

**Bifocal tibial corrective osteotomy with lengthening in achondroplasia-an analysis of results and complications**

Hae Ryoung Song  
Dept. of Orthop. Surg., Korea Univ. Med. Center, Republic of Korea

**P051**

**Ankle and knee joint reconstruction in fibular hemimelia in conjunction with the Ilizarov technique**

Hany M. Hefny  
Dept. of Orthop., Limb Reconstruction Unit, Ain Shams Univ., Egypt

**P052**

**Nonunions of the distal femur - results of bifocal treatment**

Badri Narayan, Selvadurai Nayagam  
Dept. of Orthop. Surg., Royal Liverpool Univ. Hosp., UK

**P053**

**Prognosis of outcomes in the Ilizarov treatment of patients with nonunions**

Viktor Ivanovich Mamaev  
Ural Scientific Research Inst. of Traumatology and Orthopaedics, Russia

**P054**

**Treatment of long bone nonunions with osteoporosis by Ilizarov method**

Stella V. Gyulnazarova, Olga A. Kuznetsova  
Dept. of Trauma Sequelae, Ural Scientific Research Inst. of Traumatology and Orthopaedics, Russia

**P055**

**Application of the sheffield external fixator to the lower leg Surgery**

Francesco Sala, Andrea La Maida, Fabio Castelli, Davide Gaietta, Dario Capitani  
Orthopaedic Dept., Niguarda Hosp., Italy

**P056**

**Ilizarov surgery in the adult upper limb; a 5 year review**

Simon Royston, Mick Dennison, Sandeep Kapoor  
Dept. of Orthop. Surg., Northern General Hosp., UK

**P057**

**Management of distal tibial bone tumor with resection and bone transport with fusion of ankle joint using Ilizarov technology**

Ramalingam Aruchamy  
Dept. of Orthopaedics and Traumatology, Hosp. Bintulu, Malaysia

**P058**

**Complications of segmental bone transfer over intramedullary nail**

Ata Can Atalar, Levent Eralp, Mehmet Kocaoglu  
Dept. of Orthop. Surg. and Traumatology, Istanbul Univ., Istanbul Med. Fac., Turkey

**P059**

**Distraction osteogenesis in management of soft tissue defects associating bone defects**

Barakat Said El-Alfy, Hani Mohamed El-Mowafi, Nabil Mohamed El-Moghazy  
Dept. of Orthop. Surg., Mansoura Univ., Egypt



**P060****Analysis of consolidation at the docking and distraction sites during distraction osteogenesis in the bifocal treatment of tibial defects**

Keisuke Sakurakichi<sup>1</sup>, Hiroyuki Tsuchiya<sup>2</sup>, Teruhisa Yamashiro<sup>2</sup>, Koji Watanabe<sup>2</sup>, Hidenori Matsubara<sup>2</sup>, Katsuro Tomita<sup>2</sup>

<sup>1</sup>Dept. of Orthop. Surg., Kanazawa Disabled Children's Hosp., <sup>2</sup>Dept. of Orthop. Surg., Kanazawa Univ., Japan

**P061****Distraction osteogenesis in management of soft tissue defects associating bone defects**

Barakat Sayed El-Alfy, Hani Mohamed El-Mowafi

Dept. of Orthop. Surg., Mansoura Univ., Egypt

**P062****Arthroscopically assisted ankle fusion with the Ilizarov external fixator**

Cenk Ozkan, Yaman Sarpel, Mahir Gulsen, Ismet Tan

Dept. of Orthop. Surg., Cukurova Univ., Turkey

**P063****Ankle arthrodesis using Ilizarov frame : a comparative study, diabetic neuropathic, versus non diabetic ankle arthrosis**

Hatem Ahmed Kotb<sup>1</sup>, Gamal Ahmed Hosny<sup>2</sup>, Mohamed Fadel<sup>3</sup>

<sup>1</sup>Dept. of Orthop. Surg., Fayoum Univ., <sup>2</sup>Dept. of Orthop. Surg., Benha Univ., <sup>3</sup>Dept. of Orthop. Surg., Elminia Univ., Egypt

**P064****Ilizarov ankle arthrodesis in complicated cases**

Ahmad Altonesy Abdel Samie<sup>1</sup>, Sayed A. Ali<sup>1</sup>, Mohammad Othman Mohammad<sup>1</sup>, Nabil Ahmed El-Moghazi<sup>2</sup>

<sup>1</sup>Dept. of Orthop. Surg., Zagazig Univ., <sup>2</sup>Dept. of Orthop. Surg., Mansoura Univ., Egypt

**P065****The results of orthopedic patients' treatment - through osteosynthesis**

Huseyn Ali Ismailov<sup>1</sup>, Eslami Maryam<sup>2</sup>

<sup>1</sup>Monopoly Representative of Ilizarov Scientific Center in Iran & Middle East, <sup>2</sup>Med. Student & Researcher, Iran

**P066****Treatment of patients with orthopedic foot diseases (2002-2006)**

Huseyn Ali Ismailov<sup>1</sup>, Eslami Maryam<sup>2</sup>

<sup>1</sup>Monopoly Representative of Ilizarov Scientific Center in Iran & Middle East, <sup>2</sup>Med. Student & Researcher, Iran

**P067****Treatment of the discrepancies of the leg with the method of Ilizarov**

Sergio Iriarte

Dept. of Orthop. and Traumatology, Univ. Mayor de San Andres, Bolivia

**P068****Posteromedial approach to proximal tibia for corticotomy in callus distraction**

Stefan A. Meissner<sup>1</sup>, Joachim Pfeil<sup>2</sup>, Reinhard Schnettler<sup>1</sup>, Christian Heiss<sup>1</sup>

<sup>1</sup>Dept. of Trauma Surg., Giessen Univ. Hosp., <sup>2</sup>Dept. of Orthopaedics, Wiesbaden St. Josefs Hosp., Germany

**P069****Unilateral humeral lengthening in children and adolescents**

Gamal Ahmed Hosny<sup>1</sup>, Mohamed Fadel<sup>2</sup>, Hatem Abdel-Rahman Ahmed<sup>3</sup>

<sup>1</sup>Fac. of Med., Benha Univ., <sup>2</sup>Fac. of Med., Minia Univ., <sup>3</sup>Dean Nat'l Inst. of Neuromotor System, Egypt

**P070****Femoral bone lengthening, results of monoplane devices**

Ahmad S. Allam, Mohammad G. Alashhab

Dept. of Orthop. Surg., Benha Univ., Egypt

**P071**

**Lengthening with Ilizarov frame and lengthening over nail. A comparative study**

Carolina L. Escalda, Nuno F. Craveiro-Lopes, Carlo Villacreses  
Orthop. and Trauma Dept., Garcia de Orta Hosp., Portugal

**P072**

**Treatment of leg length discrepancies in children and adolescents**

Nuno F. Craveiro-Lopes, Carlo Villacreses, Carolina L. Escalda  
Limb Lengthening and Reconstruction Unit, Orthop. and Trauma Dept., Garcia de Orta Hosp., Portugal

**P073**

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Benha Univ., Egypt

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Taner Gunes, Mehmet Erdem, Bora Bostan, Kursad Yeniel, Cengiz Sen

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Ibrahim Tuncay, Hakan Senaran, Serhan Sezgin

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Krzysztof Krauze<sup>1</sup>, Slawomir Zarek<sup>2</sup>, Wojciech Marczyński<sup>1</sup>, Krystyna Stepień<sup>1</sup>

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Yuko Takahashi, Tatsuhiro Ochiai, Kazumi Sato, Hideaki Suda, Akira Morone

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Nedžad Sabic, S. Topčić, D. Jugo, E. Sabic, K. Sabic-Haracic

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Soo Bong Hahn, Hong Kyun Kim, Hyun Woo Kim, Hui Wan Park

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Ahmad S. Allam

Benha Univ., Egypt

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Bilal Demir, Ramadan Oke, Kahraman Ozturk, Timur Yildirim, Kerem Aydin, Sarper Gursu, Safak Erdost, Vedat Sahin

Baltalimani Metin Sabanci Bone and Joint Disease Education and Research Hosp., Turkey

**P110****Knee arthrodesis using the Ilizarov method and soft tissue coverage in the treatment of complex wound following total knee arthroplasty**Murat Bozkurt<sup>1</sup>, Ali Ocguder<sup>1</sup>, Mahmut Ugurlu<sup>2</sup>, Erol Demirseren<sup>3</sup>, Nihat Tosun<sup>2</sup><sup>1</sup>Diskapi Yildirim Beyazid Training and Research Hosp., <sup>2</sup>3rd Orthopaedics Clinic, <sup>3</sup>Ataturk Training and Research Hosp., <sup>1</sup>1st Orthopaedics Clinic, <sup>3</sup>Ataturk Training and Research Hosp., Plastic Surg. and Reconstruction Clinic, Turkey

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Nurlan Dzhumagulovich Batpenov, Shalginbai Abzhanovi Baimagambetov, Kairat Dzholdybaevich Ashimov, Omirbek Baidarbekovich Kulumkulov, Alexander Alexandrovich Stepanov  
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Shiren A. Khalil<sup>1</sup>, Gamal Ahmed Hosny<sup>1</sup>, Mohamed Mahmoud Fadel<sup>2</sup>  
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Motoyuki Takaki<sup>1</sup>, Yoshiaki Makino<sup>2</sup>, Tomohiko Asahara<sup>2</sup>, Koichiro Tashiro<sup>3</sup>, Kazutaka Otsuka<sup>4</sup>, Yuji Sugitani<sup>5</sup>, Tsukasa Teramoto<sup>6</sup>  
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Mahmut Ugurlu<sup>1</sup>, İsmail Demirkale<sup>2</sup>, Murat Bozkurt<sup>3</sup>, Metin Doğan<sup>1</sup>, Nihat Tosun<sup>1</sup>  
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Umberto Alessandro Valentinotti, Bruno Bono, Rosario Spagnolo, Francesco Sala, Antonio Fiore, Dario Capitani  
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Tatsuo Yokoi<sup>1</sup>, Yasushi Suzuki<sup>1</sup>, Akihiro Hirakawa<sup>2</sup>, Aya Suzuki<sup>2</sup>  
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**Limb salvage for bone tumours by Ilizarov method**

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**Difficult saggital plane deformity corrections of the lower limbs**

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Elhussein Mohamed Elmoatasem, Mootaz Foad Thakeb  
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**The role of transosseous osteosynthesis in open long bones' fractures course of complex treatment**

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