

Official Journal of the British Trauma Society, the Australasian Trauma Society and the Saudi Orthopaedic Association in Trauma and affiliated with the Italian Society of Orthopaedics and Traumatology, the Gerhard Küntscher Society, the Spanish Society of Orthopaedic Surgery and Traumatology (SECOT), the Turkish Orthopaedic Trauma Society, AO Trauma, Group d'Etude en Traumatologie Ostéoarticulaire, the Croatian Trauma Society, the Brazilian Association of Orthopedic Trauma, the Club Italiano Osteosintesi and the European Society of Tissue Regeneration in Orthopaedics and Trauma.

Volume 46 Supplement 4, October 2015

Contents



Current Concepts and Innovations in Trauma Care in Germany

Guest Editors: Michael Nerlich and Arne Berner

- | | | | |
|-----|--|-----|--|
| S1 | Current concepts and innovations in trauma care: The German perspective
Arne Berner, Michael Nerlich | S33 | The role of angio-embolization in the acute treatment concept of severe pelvic ring injuries
Thomas Lustenberger, Sebastian Wutzler, Philip Störmann, Helmut Laurer, Ingo Marzi |
| S2 | Defect type, localization and marker gene expression determines early adverse events of matrix-associated autologous chondrocyte implantation
Peter Angele, Juergen Fritz, Dirk Albrecht, Jason Koh, Johannes Zellner | S39 | Treatment of atrophic tibia non-unions according to 'diamond concept': Results of one- and two-step treatment
Arash Moghaddam, Severin Zietzschmann, Thomas Bruckner, Gerhard Schmidmaier |
| S10 | Isolated pediatric radial head and neck fractures. A rare injury. Analysis and follow up of 19 patients
Christiane Kruppa, Matthias Königshausen, Thomas A. Schildhauer, Marcel Dudda | S51 | Analysis of 213 currently used rehabilitation protocols in foot and ankle fractures
Christian G. Pfeifer, Stephan Grechenig, Borys Frankewycz, Antonio Ernstberger, Michael Nerlich, Werner Krutsch |
| S17 | The standardized creation of a lumbar spine vertebral compression fracture in a sheep osteoporosis model induced by ovariectomy, corticosteroid therapy and calcium/phosphorus/vitamin D-deficient diet
Anica Eschler, Paula Röpenack, Philipp K. E. Herlyn, Jan Roesner, Kristin Pille, Kirsten Büsing, Brigitte Vollmar, Thomas Mittlmeier, Georg Gradl | S58 | Timing of surgery for open reduction and internal fixation of displaced proximal humeral fractures
Georg Siebenbürger, Dustin Van Delden, Tobias Helfen, Florian Haasters, Wolfgang Böcker, Ben Ockert |
| S24 | Semi-rigid screws provide an auxiliary option to plate working length to control interfragmentary movement in locking plate fixation at the distal femur
Mark Heyland, Georg N. Duda, Norbert P. Haas, Adam Trepczynski, Stefan Döbele, Dankward Höntzsch, Klaus-Dieter Schaser, Sven Märdian | S63 | Reduction and retention of thoracolumbar fractures by minimally invasive stabilisation versus open posterior instrumentation
Stefanie Fitschen-Oestern, Florian Scheuerlein, Matthias Weuster, Tim Klueter, Leif Menzdorf, Deike Varoga, Christoph Kopetsch, Michael Mueller, Alex van der Horst, Andreas Seekamp, Peter Behrendt, Sebastian Lippross |

- S71 A novel electromagnetic navigation tool for acetabular surgery**
Wolfgang Lehmann, Johannes M. Rueger, Jakob Nuechtern, Lars Grossterlinden, Michael Kammal, Michael Hoffmann
- S75 Spinal fracture reduction with a minimal-invasive transpedicular Schanz Screw system: clinical and radiological one-year follow-up**
Markus Loibl, Mariya Korsun, Julian Reiss, Boyko Gueorguiev, Michael Nerlich, Carsten Neumann, Florian Baumann
- S83 A novel locking screw hip stem to achieve immediate stability in total hip arthroplasty: A biomechanical study**
Stephan Grechenig, Boyko Gueorguiev, Arne Berner, Peter Heiss, Michael Müller, Michael Nerlich, Paul Schmitz
- S88 Femoral offset following trochanteric femoral fractures: a prospective observational study**
Benjamin Buecking, Christoph Kolja Boese, Vinzenz Seifert, Steffen Ruchholtz, Michael Frink, Philipp Lechner
- S93 Development of a scoring system based on conventional parameters to assess polytrauma patients: PolyTrauma Grading Score (PTGS)**
Frank Hildebrand, Rolf Lefering, Hagen Andruszkow, Boris A. Zelle, Bilal M. Barkatali, Hans-Christoph Pape
- S99 Treatment of distal intraarticular tibial fractures: A biomechanical evaluation of intramedullary nailing vs. angle-stable plate osteosynthesis**
Sebastian Kuhn, Julia Greenfield, Charlotte Arand, Andrey Jarmolaew, Philipp Appelmann, Dorothea Mehler, Pol M. Rommens
- S104 Bacterial contamination of open fractures - pathogens, antibiotic resistances and therapeutic regimes in four hospitals of the trauma network Cologne, Germany**
Robin Otchwemah, Volker Grams, Thorsten Tjardes, Sven Shafizadeh, Holger Bäthis, Marc Maegele, Frauke Mattner, Sabine Messler, Bertil Bouillon, Christian Probst
- S109 Size matters: The influence of the posterior fragment on patient outcomes in trimalleolar ankle fractures**
Julia Evers, Linda Barz, Dirk Wähnert, Niklas Grüneweller, Michael J. Raschke, Sabine Ochman
- S114 The cement-augmented transiliacal internal fixator (caTIFI): an innovative surgical technique for stabilization of fragility fractures of the pelvis**
Paul Schmitz, Florian Baumann, Stephan Grechenig, Axel Gaenslen, Michael Nerlich, Michael B. Müller
- S121 Reconstruction of septic diaphyseal bone defects with the induced membrane technique**
Armin O. Scholz, Sebastian Gehrman, Martin Glombitzka, Robert A. Kaufmann, R. Bostelmann, Sascha Flohe, Joachim Windolf
- S125 PMMA-augmented SI screw: a biomechanical analysis of stiffness and pull-out force in a matched paired human cadaveric model**
Stephan Grechenig, Axel Gänsslen, Boyko Gueorguiev, Arne Berner, Michael Müller, Michael Nerlich, Paul Schmitz
- S129 One year orthopaedic trauma experience using an advanced interdisciplinary hybrid operating room**
Peter H. Richter, Seth Yarboro, Michael Kraus, Florian Gebhard
- S135 Decrease of morbidity in road traffic accidents in a high income country - an analysis of 24,405 accidents in a 21 year period**
Antonio Ernstberger, Alexander Joeris, Monica Daigl, Miklos Kiss, Katharina Angerpointner, Michael Nerlich, Uli Schmucker