

Articles & PUBLICATIONS

JOURNAL PUBLICATIONS

1. Kay, D.B., Njus, G.O., Parrish, W., Theken, R.R.: Three Dimensional Computer Simulation of the Basilar Crescentic Osteotomy. *ORTHOPAEDIC CLINICS OF NORTH AMERICA*, 20(4): 571-583, 1989.
2. Albert, J., Reiman, P.R., Kay, D.B., Njus, G.O., Theken, R.R.: Ligament Strain and Ankle Joint Opening During Active Ankle Distraction. *JOURNAL OF ARTHROSCOPY AND RELATED SURGERY*, 8(4): 469-473, 1992.
3. Theken, R.R.: The Mechanics of a Two-Ring Ilizarov Bone Frame Construct. *LIBRARY OF ARCHIVES*, 44: 1-92, 1992.

JOURNAL ARTICLES

1. Theken, R.R., Mellinger, P., Byrd III, J.A., Puno, R.: A Theoretical Finite Element and Biomechanical Analysis of Transpedicular Screws for Fixation of the Spine. The 2nd International Meeting on Advanced Spine Techniques, April 26-29, 1995.
2. Theken, R.R., Puno, R., Mellinger, P., Perra, J.H., Pinto, M., Byrd III, J.A.: Fatigue Characterization of Anterior Screw/Rod Constructs in Axial Compression. The 2nd International Meeting on Advanced Spine Techniques, April 26-29, 1995.
3. Theken, R.R., Lonstein, J., Mellinger, P., Smith, M., Puno, R., Winter, R.: Fatigue Characterization of Hook/Rod Assemblies Loaded in Compression. The 2nd International Meeting on Advanced Spine Techniques, April 26-29, 1995.

ABSTRACTS and PROCEEDINGS

1. Kay, D.B., Njus, G.O., Parrish, W., Theken, R.R.: Three Dimensional Computer Simulation of the Basilar Crescentic Osteotomy. *ORTHOPAEDIC CLINICS OF NORTH AMERICA*, 20(4): 571-583, 1989.
2. Albert, J., Reiman, P.R., Kay, D.B., Njus, G.O., Theken, R.R.: Ligament Strain and Ankle Joint Opening During Active Ankle Distraction. *JOURNAL OF ARTHROSCOPY AND RELATED SURGERY*, 8(4): 469-473, 1992.
3. Theken, R.R., Njus, G.O., Kay, D.B.: Induced Strain Patterns in Diaphyseal Bone for Loaded Ilizarov Ring Constructs. A.S.A.M.I. North America, Charleston, SC, Oct. 5, 1990.
4. Theken, R.R., Albert, J., Reimam, P.R., Kay, D.B., Njus, G.O.: Ligament Strain and Ankle Joint Opening During Invasive Ankle Distraction. International Arthroscopy Association, Ontario, Canada, May, 1991.
5. Theken, R.R., Cheney, R.A., Kay, D.B., Njus, G.O.: Biomechanical Characterization of the Functional Structural Unit of the Ilizarov Fixator. A.S.A.M.I. North America, Charleston, SC, Oct. 4, 1991.
6. Theken, R.R., Njus, G.O., Kay, D.B.: The Mechanics of a Ilizarov Bone-Frame Construct. Akron City Hospital Annual Orthopaedic Medical Conference, Akron, Ohio, April, 1991.
7. Theken, R.R., Puno, R.M.: A Theoretical Finite Element & Biomechanical Analysis of Transpedicular Screws for Fixation of the Spine. Proceedings of the Tenth Annual North American Spine Society Conference, Washington, DC, October 18-21, 1995.

PRESENTATIONS

1. "Three Dimensional Computer Simulation of the Basilar Crescentic Osteotomy." A.S.A.M.I. North America, St. Paul, MN; July 21-24, 1988.
2. "Simulation of Basilar Metatarsal Osteotomies." Thirty-Fourth Annual Orthopedic Research Society Meeting, Las Vegas, NV; February 5-8, 1989.
3. "Induced Strain Patterns in Diaphyseal Bone for Loaded Ilizarov Ring Constructs." A.S.A.M.I. North America, Charleston, SC; October 5, 1990.
4. "Ligament Strain and Ankle Joint Opening During Invasive Ankle Distraction." International Arthroscopy Association, Ontario, Canada; May, 1991.
5. "Biomechanical Characterization of the Functional Structural Unit of the Ilizarov Fixator." A.S.A.M.I. North America, Charleston, SC; October 4, 1991.
6. "The Mechanics of a Ilizarov Bone-Frame Construct." Akron City Hospital Annual Orthopaedic Medical Conference, Akron, OH; April, 1991.
7. "A Theoretical Finite Element & Biomechanical Analysis of Transpedicular Screws for Fixation of the Spine." Tenth Annual North American Spine Society Conference, Washington, DC, October 18-21, 1995.
8. "The Mechanical Evaluation of Microvessel Anastomoses in the Rabbit." Fourth Annual Adjunct Faculty Breakfast, The University of Akron, Akron, OH; May 3, 1988.
9. "Dynamic Splinting: Choices and Options." Eleventh Annual Meeting of the American Society of Hand Therapists, Baltimore, MD; September 15-18, 1988.
10. "Biomechanical Evaluation of Microarterial and Microvenous Anastomoses in the Rabbit." Thirty-Fourth Annual Orthopaedic Research Society Meeting, Las Vegas, NV; February 5-8, 1989.
11. "State of the Art Structural Evaluation of Spine Implant Longitudinal Connectors." Presented to the ASTM Workshop on Spinal Implants, ASTM Section F-04.07.02, Spinal Implant Component Testing, Kansas City, MO; May 24-26, 1989.
12. "Cyclical Loading of Anterior and Posterior Spinal Constructs Following Corpectomy." International Society for the Study of the Lumbar Spine, Miami, FL; April 13-17, 1988.
13. "Load to Failure Strengths of Spinal Implants in Osteoporotic Spines - A Comparison Study of Pedicle Screws, Laminar Hooks, and Spinous Process Wires." American Academy of Orthopaedic Surgeons, New Orleans, LA; February 9-13, 1990.
14. "Material Evaluation of a Composite Implant." Biomedical Engineering Society, Salt Lake City UT; October 16-18, 1992.
15. "Material Evaluation of a Composite Implant for Posterior Lumbar Interbody Fusion." American Society of Mechanical Engineers, Bioengineering Division, Anaheim CA; November 8-13, 1992.
16. "Orthopaedic Engineering." Cleveland Section Monthly Meeting, American Society of Mechanical Engineers, Cleveland OH; November 19, 1992.
17. "Orthopaedic Engineering and the Role of the Engineer." University of Akron, Biomedical Engineering Seminar, Akron, OH; April 23, 1993.
18. "Static and Cyclical Biomechanical Analysis of Pedicle Screw Constructs." Dewald Spine Society Meeting, Napa Valley, CA; May 5-8, 1993.
19. "Spinal Biomechanics." Western Canadian Orthopaedic Meeting, Vancouver, BC Canada; January 6-7, 1994