AOTRAUMA NORTH AMERICA

AOTrauma Course-Basic Principles of Fracture Management

November 30, 2017 - December 3, 2017
Atlanta, GA, USA

This Basic Course is designed to provide the participant with a fundamental knowledge of operative treatment of fractures according to the AO principles. The four guiding AO principles of fracture fixation are: 1. Anatomic reduction of the fracture fragments, particularly in joint fractures; 2. Stable fixation to ensure proper healing of the fracture allowing surrounding tissue to move and strengthen; 3. Atraumatic surgical technique to preserve the blood supply to the bone fragments and soft tissue; 4. Early, pain-free mobilization returning the patient to function as soon as possible. The course will cover the concepts of absolute and relative stability, as applied in context, of the soft tissue injury for each limb segment's major fracture types. This course is the foundation for the AONA curriculum, which teaches the surgeon how to manage trauma and trauma reconstruction. The goal of this course is not to advocate the treatment of all fractures by surgical fixation, but rather to help ensure that when surgery is carried out, that it is done properly based upon principles, appropriate preoperative planning, and decision making.

Event Summary

Tuition:
Level Name: Participant - Orthopaedic
Pricing Tier: Resident
Tuition: $1,095.00

Level Name: Participant - Orthopaedic
Pricing Tier: Attending
Tuition: $1,495.00

Course Prerequisite(s):
No Prerequisites

Venue:
Hyatt Regency Atlanta
Atlanta, Georgia, USA
Phone Number: 404-577-1234

Please Note: This course is available to physicians only.

Language(s):
English
Directly Provided by:
AO North America

Professional Level Prerequisite(s):

- Residency Year 1
- Residency Year 2
- Residency Year 3
- Residency Year 4
- Residency Year 5
- Residency Year 6
- Residency Year 7
- Residency Year 8
- Attending
- Fellow

CME

Continuing Education Credit: 31.00

- ACCME ACCREDITED WITH COMMENDATION

AO North America is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AONA has been resurveyed by the Accreditation Council for Continuing Medical Education (ACCME) and awarded Accreditation with Commendation.

- **Designation Statement** - AO North America designates this live educational activity for a maximum of 31.00 ***AMA PRA Category 1 Credits™***. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Continuing Medical Education (CME) mission of AO North America (AONA®) is to provide comprehensive multidisciplinary needs based education to surgeons, fellows, and residents in the specialties of orthopedic, hand, craniomaxillofacial, spine, neurosurgery, and veterinary surgery in the areas of trauma (i.e.), operative reduction and fixation), degenerative disorders, deformities, tumors, and reconstruction.

Expected results of AONA's CME activities for surgeons, fellows, and residents are to:
• Increase their knowledge base and surgical skill level
• Improve competence by applying advances of knowledge in patient care in the areas of trauma, degenerative disorders, deformities, tumors, and reconstructive surgical techniques
• Address practice performance gaps by improving management of aspects of traumatic injuries and musculoskeletal disorders (i.e., pre-operative planning to post-operative care)

Learner Objectives

Upon completion, participants should be able to:

- Discuss the concepts of stability, their influence on bone healing, and how to apply implants to achieve appropriate stability
- Plan a treatment based on assessment, imaging, classification, and decision making
- Apply reduction techniques in fracture management with attention to the importance of the soft-tissue
- Apply related psychomotor skills to the practical application of orthopaedic implants to fractured bones
- Plan the initial treatment of the polytraumatized patient

Faculty

Donegan, Derek - Co-Chairperson
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Mehta, Samir - Co-Chairperson
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Samir Mehta, MD is an Associate Professor in the Department of Orthopaedic Surgery at the Perelman School of Medicine at the University of Pennsylvania. After completing his undergraduate work at Northwestern University in the Integrated Science Program with a minor in English, Samir returned to his home-town of Philadelphia for medical school at Temple University. He stayed in Philadelphia for his Orthopaedic Surgery residency at the University of Pennsylvania where he was a research fellow and was also awarded the DeForest Willard Award. Having developed an interest in Orthopaedic Traumatology, Samir furthered his education as an orthopaedic trauma fellow at Harborview Medical Center in Seattle, Washington. Upon completion of his orthopaedic trauma fellowship, Samir was awarded the AO John Border Award and continued his education at the University of Saarland in Homburg, Germany. Upon his return the United States, Samir took a faculty position at the University of Pennsylvania as Chief or the Orthopaedic Trauma and Fracture Service. He is also the clinical research advisor of the Biedermann Lab for Orthopaedic Research at the University of Pennsylvania and the interim medical director for clinical research for the Department of Orthopaedic Surgery. As a result of a busy clinical practice, he has developed a particular interest in pelvic and acetabular fractures, repair of non-unions and malunions, and reconstruction of peri-articular fractures. Samir is also actively involved with the American Academy of Orthopaedic Surgery, the American Orthopaedic Association, the Orthopaedic Trauma Association, and he AO Foundation. He has been awarded the prestigious American Orthopaedic Association-North American Traveling Fellowship, the AO Howard Rosen Teaching Award, and also has served as an AAOS Health Policy Fellow on Capitol Hill. His research interests include non-unions, open fractures, traumatic articular cartilage injury, and fracture healing. He has participated in over one-hundred peer review publications, has multiple current funded studies, and has presented on numerous occasions nationally and internationally. He has been awarded several grants from agencies such as the DOD, PCORI, and NIH. He has been actively involved in multiple research projects examining graduate medical education and is currently a faculty member for the AAOS Course for Orthopaedic Educators. Samir is actively involved in the Department of Orthopaedic Surgery at the University of Pennsylvania serving on the Graduate Medical Education Committee, Finance Committee, as the Trauma Liaison, and participating in Resident Applicant Interviews. In addition, Samir enjoys running, coaching little league, and traveling.

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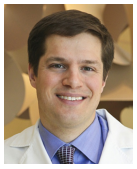

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Agenda

Day1

Thursday, November 30, 2017 - 07:45 - 18:55 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
07:45 - 08:00	Introduction / Welcome			
08:00 - 08:20	AIRS PreTest			
08:20 - 09:20	MODULE 1: SOFT TISSUE			
08:20 - 08:35	History of Fracture Care and Evolution of Principles			
08:35 - 08:45	Bone: Fracture Classification - A Guide to Clinical Decision Making			
08:45 - 09:00	Soft Tissue Injury and Compartment Syndrome			
09:00 - 09:10	Open Fractures			
09:10 - 09:20	Questions / Answers and AIRS			
09:20 - 10:20	MODULE 2: STABILITY AND BONE HEALING			
09:20 - 09:35	Bone Healing			
09:35 - 09:50	Spectrum of Stability			
09:50 - 10:05	Surgical Reduction Techniques: Respecting the Behavior of Bone			
10:05 - 10:20	Questions / Answers and AIRS			
10:20 - 10:40	Coffee Break			
10:40 - 11:30	MODULE 3: PRINCIPLES - ABSOLUTE STABILITY			
10:40 - 10:50	Screw Design and Function			
10:50 - 11:00	Plate Design and Function			
11:00 - 11:10	Tension Band Principles			
11:10 - 11:30	Questions / Answers and AIRS			
11:30 - 12:15	Lunch			
12:15 - 13:55	PRACTICAL EXERCISE I: (Absolute Stability); A. Introduction to Implants; B. Lag Screw; C. Neutralization Plate; D. Buttress Plate			
13:55 - 14:05	Break			
14:05 - 15:45	PRACTICAL EXERCISE I: (Absolute Stability-Continued); E. Axial Compression with Plates; F. Oblique Fracture: Lag Through Plate; G. Olecranon Fixation			
15:45 - 16:05	Coffee Break / Travel to Lectures			
16:05 - 17:15	MODULE 4: PRINCIPLES - RELATIVE STABILITY			
16:05 - 16:15	External Fixation Relative Stability			
16:15 - 16:30	Bridge Plating with Traditional Implants and Techniques			
16:30 - 16:45	Locked Plating - Biology, Biomechanics, Clinical Applications			
16:45 - 16:55	Intramedullary Techniques, Relative Stability			
16:55 - 17:15	Questions / Answers and AIRS			
17:15 - 17:25	Travel to Lab			
17:25 - 18:55	PRACTICAL EXERCISE II: (Relative Stability); A. External Fixation; B. Bridge Plating; C. Comparison of Locked and Unlocked Screws in Osteoporotic Bone			

Day2

Friday, December 01, 2017 - 07:15 - 19:00 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
07:15 - 08:00	Daily Morning Huddle			
08:00 - 09:30	Discussion Group One: Review of Principles and Decision Making			
09:30 - 09:40	Travel to Lab			
09:40 - 11:40	PRACTICAL EXERCISE III: AO Skills Lab			
11:40 - 12:30	Lunch			
12:30 - 13:40	MODULE 5: DIAPHYSEAL MANAGEMENT			
12:30 - 12:40	Radiation Safety			
12:40 - 12:50	Femur			
12:50 - 13:00	Tibia			
13:00 - 13:10	Humerus			
13:10 - 13:20	Radius & Ulna			
13:20 - 13:40	Questions / Answers and AIRS			
13:40 - 13:50	Travel to Breakouts			
13:50 - 14:40	Discussion in Small Group Roms: Review of Intramedullary Nailing			
14:40 - 14:50	Travel to Lab			
14:50 - 16:00	PRACTICAL EXERCISE IV: (Intramedullary Nailing); A. Femur; B. Tibia			
16:00 - 16:10	Travel to Lectures			
16:10 - 16:25	Unique Learning Resources of the AO Foundation			

16:25 - 16:40	Preoperative Planning
16:40 - 17:50	PRACTICAL EXERCISE V: Preoperative Planning - Forearm Model
17:50 - 18:00	Filler Time
18:00 - 19:00	Reception

Day3

Saturday, December 02, 2017 - 07:15 - 18:45 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
07:15 - 08:00	Daily Morning Huddle			
08:00 - 09:30	Discussion Group Two: Diaphyseal Fractures			
09:30 - 09:40	Travel to Lab			
09:40 - 10:50	PRACTICAL EXERCISE VI: Fixation of Radius / Ulna			
10:50 - 11:00	Coffee Break / Travel to Lectures			
11:00 - 12:00	MODULE 6: LOWER EXTREMITY - ARTICULAR FRACTURES			
11:00 - 11:10	Principles of Management - Articular			
11:10 - 11:25	Ankle Fractures			
11:25 - 11:35	Introduction to Pilon Fractures			
11:35 - 11:45	Introduction to Tibial Plateau			
11:45 - 12:00	Questions / Answers and AIRS			
12:00 - 12:45	Lunch			
12:45 - 13:50	PRACTICAL EXERCISE VII: Ankle Fractures - Type C Malleolar			
13:50 - 14:00	Travel to Lectures			
14:00 - 14:50	MODULE 6 (continued): LOWER EXTREMITY - ARTICULAR FRACTURES			
14:00 - 14:10	Distal Femur			
14:10 - 14:20	Extracapsular Hip Fracture			
14:20 - 14:30	Intracapsular Hip Fracture			
14:30 - 14:40	Olecranon and Patellar Fractures			
14:40 - 14:50	Questions / Answers and AIRS			
14:50 - 15:00	Travel to Lab			
15:00 - 16:15	PRACTICAL EXERCISE VIII: Fixation of an Intertrochanteric Hip Fracture - Nail vs. Plate			
16:15 - 16:25	Coffee Break / Travel to Lectures			
16:25 - 17:10	MODULE 7: UPPER EXTREMITY - ARTICULAR FRACTURES			
16:25 - 16:35	Proximal Humerus			
16:35 - 16:45	Distal Humerus			
16:45 - 16:55	Distal Radius			
16:55 - 17:10	Questions / Answers and AIRS			
17:10 - 18:45	MODULE 8: SPECIAL FRACTURE PROBLEMS			
17:10 - 17:25	Polytrauma			
17:25 - 17:35	Radiographic Evaluation and Classification of Pelvic Ring Disruptions			
17:35 - 17:45	Acute Management of Pelvic Ring Injuries			
17:45 - 17:55	Questions / Answers and AIRS			
17:55 - 18:45	AIRS PostTest			

Day4

Sunday, December 03, 2017 - 07:30 - 14:00 - (includes breaks, travel-time and meals)

Schedule	Title	Moderator	Faculty	Room
08:00 - 09:15	Discussion Group Three: Articular Fractures			
09:15 - 09:20	Travel to Lab			
09:20 - 10:50	PRACTICAL EXERCISE IX: (External Fixation); A. Pelvic Fracture; B. Spanning External Fixation			
10:50 - 10:55	Travel to Lectures			
10:55 - 12:10	MODULE 8 (Continued): SPECIAL FRACTURE PROBLEMS			
10:55 - 11:10	Infection			
11:10 - 11:20	Nonunions			
11:20 - 11:30	Malunions			
11:30 - 11:50	Violations of AO Principles: How Not To Do AO			
11:50 - 12:00	Questions / Answers and AIRS			
12:00 - 12:10	Closing Comments (Introduce Principles II) / End of Course AIRS Questions			

Presentation Information

Faculty Disclosure:

It is the policy of AO North America to abide by the Accreditation Council for Continuing Medical Education Standards for Commercial Support, Standard 2: "Disclosures Relevant to

It is the policy of AO North America to abide by the Accreditation Council for Continuing Medical Education Standards for Commercial Support. Standard 2: "Disclosures Relevant to Potential Commercial Bias and Relevant Financial Relationships of Those with Control over CME Content," requires all planners, including course directors, chairs, and faculty, involved in the development of CME content to disclose their relevant financial relationships prior to participating in the activity. Relevant financial relationships will be disclosed to the activity audience. The intent of the disclosure is not to prevent a faculty with a relevant financial or other relationship from teaching, but to provide participants with information that might be of importance to their evaluation of content. All potential conflicts of interest have been resolved prior to the commencement of this activity.

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