Arctic AOTrauma Course — Management of Fractures of the Hand and Wrist

February 11–13, 2015 Tromsø, Norway
Lecture hall: Panoramic Hall, Rica Ishavshotel, Tromsø
Anatomical specimen dissection: University of Tromsø – Arctic University of Norway.

Jesse Jupiter instructing at the Nordic AO course in Hand and Wrist Fractures in Oslo in 2008.

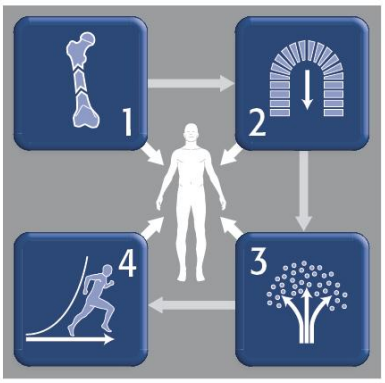
AOTRAUMA

Value statement

AOTrauma is committed to improve patient care outcomes through the highest quality education. We strive to combine the right knowledge and surgical skills that empower the orthopedic and trauma surgeons to put theory into practice and to improve fracture management for the benefit of the patient.

The AO principles of fracture management

Fracture reduction and fixation to restore anatomical relationships.



Fracture fixation providing absolute or relative stability, as required by the "personality" of the fracture, the patient, and the injury.

Early and safe mobilization and rehabilitation of the injured part and the patient as a whole.

Preservation of the blood supply to soft tissues and bone by gentle reduction techniques and careful handling.

Dear AOTrauma course participant,

We are honored to welcome you to the Artic AOTrauma Course— Management of Fractures of the Hand and Wrist. We hope you will enjoy your course and the entire experience.

What is AOTrauma? We are a "clinical division"—a community for trauma and orthopedics within the AO Foundation. As a clinical division we aim to integrate and align applied and clinical research, education, and community development functions into one direction—AOTrauma for the benefit of our members, stakeholders, and patients.

How can AOTrauma benefit you? By working as a single team we focus and leverage our resources, expertise, and skills to create and deliver new and greater value to our members.

What does this mean in education? AOTrauma is committed to providing you the best possible educational experience by continuously embracing and introducing new educational techniques to help you learn and more effectively implement your knowledge for the benefit of your patients.

Why join AOTrauma? Joining AOTrauma means you are part of the trauma and orthopedic community within the AO. AOTrauma will help you develop lifelong friendships and relationships. We will help you access our “knowledge network” and take part in new opportunities that advance trauma care.

Yours sincerely,

Kodi Kojima
Chairperson AOTrauma
Education Commission

John (Jack) Wilber
Chairperson AOTrauma
International Board

PS: Your experiences with us, over the next few days, will result in the realization of new and meaningful knowledge, skills, and understanding that we hope will translate into improved patient care.

Goal of the course

The AOTrauma Advanced Principles course builds upon the AO Principles and techniques learned in the AOTrauma Basic Principles course and focuses on the principles and techniques in the management of hand and wrist fractures.

Target participants

The Arctic AOTrauma Course—Management of Fractures of the Hand and Wrist is targeted at surgeons at the threshold of becoming independent surgeons and taking over decision-making responsibility for the treatment of complex injuries or experienced Orthopaedic-, Hand-, Trauma- or Plastic surgeons who are actively involved in hand and wrist trauma management, but need an update of current concepts. Participants who already completed the AOTrauma Course—Basic Principles of Fracture Management and who are actively involved in trauma management will be prioritized.

Course objectives

At the end of this course, participants will be able to:

- Describe, apply, and practice the principles of internal fixation in the hand and wrist.
- Demonstrate an understanding of preoperative decision-making and the indications and contraindications of those decisions.
- Identify and summarize the advantages and disadvantages of different fixation techniques.
- Describe the postoperative treatment and common soft-tissue problems.
- List the common complications of hand and wrist injuries and treatment and discuss their prevention and management.
- Relate the principles and techniques of treatment to personal clinical experience.

Course description

The AOTrauma Course—Management of Fractures of the Hand and Wrist is an interactive and discursive arena in which participants will be able to understand, discriminate, and consolidate the principles, skills, and techniques applicable to the use of internal fixation in the hand and wrist.

The course will concentrate on internal fixation of fractures as well as skeletal reconstruction procedures.

At the end of the course, participants will have a broader and more secure comprehension of how, when, and where to apply their knowledge in their clinical practice.

The course will be taught in a modular format. Each module consists of a small number of short evidence based lectures, which will cover the key information required.

In the practical exercises participants will be trained in the application of different techniques and training on Synbone. There will be given training on anatomical specimens for approaches for the different techniques. Discussing cases in small groups as well as panel discussions will help participants to understand decision-making and management skills.

Course Faculty

The faculty for this course is composed of international, nordic and national surgeons distinguished in the field of operative fracture care.

Chairpersons

Hebe Désirée Kvernmo, MD, PhD, MHA
Senior Consultant/Professor
Hand Service
University Hospital of North Norway/University of Tromsø – Arctic University of Norway
Tromsø, Norway

Karl Prommersberger, MD, PhD
Chief Consultant/Professor
Hand Service
Rhön Klinikum
Bad Neustadt, Germany

International Faculty

Peter Brink, MD, PhD Consultant/Professor		Maastricht University Hospital, Maastricht	Netherlands
Amit Gupta, MD Director		Louisville Arm and Hand, Louisville KY	US
Peter Jørgsholm, MD Consultant		Privathospitalet Mølholm, Kerteminde	Denmark

Nordic Faculty

Michel Boeckstyns, MD, PhD Consultant		Gentofte Hospital, Copenhagen	Denmark
Niels Thomsen, MD, PhD Senior Consultant		Skåne University Hospital/Lund University Malmø	Sweden
Yngvar Krukhaug MD, PhD Consultant/Assistant Professor		University Hospital of Bergen/University of Bergen, Bergen	Norway
Jan-Ragnar Haugstvedt MD, PhD Consultant		Moss Hospital, Moss	Norway

Wednesday, February 11, 2015 — morning

Arctic AOT Course—Management of Fractures of the Hand and Wrist

08:00	Bus transfer to University of Tromsø – Arctic University of Norway. Meeting point 07:50 at main entrance at Rica Ishavshotel.	
08:30-09:00	Course registration of participants at University of Tromsø.	
Module 1 09:00 –10:30	**Introduction and basic principles** Moderators: Kvernmo, Prommersberger	
09:00 – 09:15	Welcome and introduction	Kvernmo, Prommersberger
09:15 – 09:35	Functional anatomy of the hand Lecture	Gupta
09:35 –10:00	Clinical evaluation of hand and wrist injuries Lecture	Brink
10:00 – 10:30	Radiological evaluation of hand and wrist Lecture	Jørgsholm
10:30 – 11:00	COFFEE BREAK	
Module 2 11:00 – 13:00	**Video demonstration and anatomical specimens dissection 1** Moderators: Prommersberger, Gupta, Krukhaug	
	At the end of these sessions, participants will be able to: *– Identify the relevant anatomy and use the appropriate surgical approaches*	
11:00 – 12:00	Approach to the phalanx and metacarpal II-V fractures incl. PIP-and DIP-joint.	Gupta
12:00 – 12:30	Approach to the thumb fractures	Prommersberger
12:30 – 13:00	Approach to the ulnar collateral ligament	Kvernmo
13:00 – 14:00	LUNCH BREAK	

Wednesday, February 11, 2015 — afternoon

Arctic AOT Course—Management of Fractures of the Hand and Wrist

Module 3 14:00 –15:45	**Video demonstration and anatomical specimens dissection 2** Moderators: Boeckstyns, Haugstvedt, Prommersberger	
14:00 – 15:00	The volar approach to the forearm, wrist and scaphoid (Henry´s approach)	Boeckstyns
15:00 – 15:20	Carpal tunnel release	Thomsen
15:20– 15:45	Berger approach to the carpus and four corner fusion	Haugstvedt
15:45	End of Day 1	
16:00	Bus transfer to Rica Ishavshotel. Meeting point 15:55 at upper entrance at MH-building, University of Tromsø – Arctic University of Norway	

Thursday, February 12, 2015 — morning

Arctic AOT Course—Management of Fractures of the Hand and Wrist

At Rica Ishavshotel

07:45	Revision of Day 1	Kvernmo, Prommersberger
Module 4 08:00 –09:30	**Extraarticular fractures 1** Moderators: Haugstvedt, Thomsen, Kvernmo	
	At the end of these sessions, participants will be able to: – Outline goals of and describe different options for treatment – Describe how to successfully manage metacarpal and phalangeal injuries	
08:00 – 08:30	Principles of treatment of extraarticular metacarpal fractures (conservative and operative treatment) Lecture	Kvernmo
08:30 – 09:00	Principles of treatment of extraarticular phalangeal fractures (conservative and operative treatment) Lecture	Haugstvedt
09:00 – 09:30	General principles of ORIF in small bones. Different plate techniques (neutralization, compression, bridging & locking) Lecture	Thomsen
09:30 – 10:00	COFFE BREAK	
Module 5 10:00 –12:00	**Extraarticular fractures 2** Moderators: Jørgsholm, Boeckstyns, Thomsen	
10:00 – 10:30	Practical exercise 1 2.0 mm lag screw application for the treatment of an spiral diaphyseal metacarpal shaft fracture. Video 22030.	Boeckstyns
10:30 – 11:00	Practical exercise 2 Fixation of a fracture of the proximal phalanx with a compression plate. Video 22049.	Thomsen
11:00 – 11:30	Principles of treatment of scaphoid fractures (conservative and operative treatment) Lecture	Jørgsholm
11:30 – 12:00	Practical exercise 3 Fixation of scaphoid fractures using HCS 3.0 mm. Video 22061.	Jørgsholm
12:00 – 13:00	LUNCH BREAK	

Thursday, February 12, 2015 — afternoon

Arctic AOT Course—Management of Fractures of the Hand and Wrist

At Rica Ishavshotel

Module 6 13:00 –14:30	**Intraarticular fractures** Moderators: Thomsen, Gupta, Boeckstyns	
	At the end of this module, participants will be able to: – Describe the different injury mechanisms in articular hand fractures – Outline treatment options and apply the principles of lag screw application in an unicondylar and a Bennett fracture – Anticipate treatment complications and discuss how to avoid them	
13:00 – 13:30	Principles of treating intraarticular fractures in the hand Lecture	Brink
13:30 – 14:00	Practical exercise 4 Fixation of an unicondylar proximal phalangeal fracture using a 1.5/2.0 mm lag screw. Video 22034.	Prommersberger
14:00 – 14:30	Practical exercise 5 Fixation of a Rolando fracture applying a locking compression plate (LCP) 2.0 mm. Video 22036.	Gupta
14:30 – 15:00	COFFEE BREAK	
Module 7 15:00 –17:20	**Elective reconstruction** Moderators: Gupta, Haugstvedt, Boeckstyns	
	At the end of this module, participants will be able to: – Discuss potential treatment complications and how to avoid them – Formulate the goals, indications, and positioning of an arthrodesis – Evaluate the benefits, limitations, and complications of different fixation methods	
15:00 – 15:30	Hand fractures – complications and salvage procedures Lecture	Gupta
15:30 – 15:50	Practical exercise 6 Arthrodesis of MCP-joint (thumb) using a locking compression plate (LCP) 2.0 mm. Video 22041.	Boeckstyns
15:50 – 16:20	Practical exercise 7 Rotational correction on the metacarpal with plate application.	Haugstvedt
16:20 – 17:20	Small group discussions/case problem discussion Management principles of hand fractures Group 1: Brink, Thomsen, Group 2: Gupta, Kvernmo Group 3: Jørgsholm, Boeckstyns Group 4: Prommersberger, Haugstvedt	All participants
17:20	End of Day 2	

Friday, February 13, 2015 — morning

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At Rica Ishavshotel

08:00 – 08:15	Revision of Day 2	Kvernmo, Prommersberger
Module 8 08:15 – 10:00	**Distal radius fractures** Moderators: Krukhaug, Prommersberger, Boeckstyns	
	At the end of these sessions, participants will be able to: – Identify the important aspects of the joint anatomy using x-rays – Classify fractures of the distal radius – Describe and apply management principles and techniques	
08:15 – 08:30	Classification of distal radius fractures/instability assessment Lecture	Krukhaug
08:30 – 09:00	Principles of treatment (conservative and operative treatment) Lecture	Kvernmo
09:00 – 09:30	Practical exercise 8 Volar plating. Video 22096.	Krukhaug
09:30 – 10:00	Practical exercise 9 Distal ulna and styloid fracture fixation. Video 22099.	Brink
10:00 – 10:30	COFFE BREAK	
Module 9 10:30 –12:00	**Distal radius fractures - complications and malunion 1** Moderators: Prommersberger, Brink, Krukhaug	
	At the end of these sessions, participants will be able to: – Identify the most common deformities and their consequences – Evaluate the indications and contraindications of surgical correction – Outline principles of corrective osteotomy of the distal radius	
10:30 –11:00	Complications of distal radius plating Lecture	Kvernmo
11:00 –11:30	Malunion of the distal radius – treatment planning Lecture	Prommersberger
11:30 –12:00	Distal radius fractures – salvage procedures (ulnar shortening, partial- and total fusion, arthroplasty, denervation) Lecture	Boeckstyns
12:00 – 13:00	LUNCH	

Friday, February 13, 2015 — afternoon

Arctic AOT Course—Management of Fractures of the Hand and Wrist

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Module 10 13:00 –13:00	**Distal radius fractures - complications and malunion 2** Moderators: Gupta, Haugstvedt, Jørgsholm	
13:10 – 13:45	Panel case discussions on radial malunion	all
13:45 – 14:15	Practical exercise 10 – Corrective osteotomy of a distal radial malunion and application of bone graft. Video 22095. Demonstration on Synbone: Group 1: Brink Group 2: Boeckstyns Group 3: Krukhaug Group 4: Prommersberger	
14:15 – 14:30	Has low-intensity pulsed ultrasound and pulsed electromagnetic fields a place in fracture treatment? Lecture	Brink
14:30 – 15:00	Evaluation of course	all
15:00	End of course	
15:10	**Bus transfer to Tromsø airport corresponding with flights to Oslo:** Scandinavian airlines departing at 16.10 (SK 4423) Norwegian departing at 16.30 (DY 383)	

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Saturday, February 14, 2015
AOTrauma Post-Course Meeting

At Rica Ishavshotel

08:00 – 11:00	**Round Table** **How to improve hand trauma management in the Arctic surrounding** Moderators: Kvernmo, Lorentzen	AO Faculty Optional for AO course participants
08:00 – 08:45	The community perspective	Lorentzen
08:45 – 09:30	The need of a FESSH Hand Trauma accreditated Center in Northern Norway Regional Health Enterprize	Kvernmo
09:30 – 10:00	COFFEE BREAK	
10:00 – 10:45	The challenge of centralization of competence versus local handling of hand traumas	Faculty
10:45 – 11:00	Closing remarks	Kvernmo, all
11:00	LUNCH	

Karl-Ivar Lorentzen is Vice-President of the Norwegian Orthopaedic Association and Chief of Orthopaedic- and Plastic Surgery Department at University Hospital of North Norway.

Course organization

Hebe Désirée Kvernmo
North Norway University Hospital/University of Tromsø – Arctic University of Norway
Mob +47 48 07 13 11
hebe.kvernmo@gmail.com

The course is supported by the AOTrauma Norway and DePuy Synthes, Norway, University Hospital of North Norway (surgical equipment and technical assistants) and the University of Tromsø – Arctic University of Norway (anatomical specimen and wet lab fascilities).

Course logistics and Course information

Kristin Solstad
KS Conference & Incentive
Jørgensløkka 3
1387 Asker, Norway
Tel +47 66 90 40 23
Fax +47 66 90 40 24
Mob +47 926 54 255
kristin@ksci.no
www.ksci.no

Registration and Course fee

Please register online:
https://aotrauma2.aofoundation.org/eventdetails.aspx?id=3495&from=PG_COURSEDIRECTORY

Arctic AOTrauma Course fee:
NOK 8 500 (€1050).

Included in Arctic AOTrauma Course fee are course documents, coffee breaks, course dinner and course certificate.

Arctic AO Trauma Post-Course meeting fee:
NOK 500 (€60).

The course fee is including coffee and lunch.

Accreditation
AO Trauma Courses are accredited for continuing medical education (CME) programs. The number of credit points or hours varies from country to country. The final information and number of credit points will be distributed with the course certificate.

Evaluation guidelines
All AOTrauma courses apply the same evaluation process, either audience response system (ARS) or paper and pencil questionnaires. This will help AO Trauma to ensure that we continue to meet your training needs. In some regions, CME accreditation is dependent on the participant's evaluation results.

Intellectual property
Course materials, presentations, and case studies are the intellectual property of the course faculty. All rights are reserved. Check hazards and legal restrictions on www.aotrauma.org/legal.
Recording, photographing, or copying of lectures, practical exercises, case discussions, or any course materials is strictly forbidden. Participants violating intellectual property will be dismissed.

The AO Foundation reserves the right to film, photograph, and audio record during their events. Participants must understand that in this context they may appear in these recorded materials. The AO Foundation assumes participants agree that these recorded materials may be used for AO marketing and other purposes, and made available to the public.

Security
Wearing of a name tag is compulsory during lectures, workshops, and group discussions.

No insurance
The course organization does not take out insurance to cover any individual against accidents, thefts or other risks.

Use of mobile phone
Use of mobile phone is not allowed in the lecture halls and in other rooms during educational activities. Please be considerate of others by turning off your mobile phone.

Information desk
Will be open daily during course hours.

Dress code
Casual or sportswear
In Tromsø at this time it is winter. For those who will go outside, warm clothes and suitable shoes are advisable.

Course language
English

Course venue and hotel accommodation

Course venue Wednesday February 11
University of Tromsø – Arctic University of Norway,
Sykehusveien 38, 9019 Tromsø, Norway.

Foto ©: UNN

Course venue February 12, and Accommodation for participants
Rica Ishavshotell
Fredrik Langes gate 2, 9008 Tromsø, Norway

Accomodation
Make your reservation by sending an email together with, name and date. to Kristin Solstad: kristin@ksci.no
Last day for reservation is January 11th.

Travel and accomodation is the responsibility of each participant.

Events during the course:

Thursday:
Course dinner.
At 19:00 at Emmas Drømmekjøkken (for registrated only)
We walk from the hotel at 18:45.

Transportation

Special bus for course participants

Wednesday
08:00 Bus from Rica Ishavshotel to University of Tromsø – Arctic University of Tromsø
16:00 Bus from University of Tromsø – Arctic University of Tromsø - Hotel
In addition, local buses run every 10 minutes during the day.

Friday
15:10 Bus from Rica Ishavshotel to the Airport
In addition, local buses run every 20 minutes during the day.

Sponsors

We would like to thank DePuy Synthes for their support without which this event would not be possible. Also we would like to thank the University Hospital of North Norway, the University of Tromsø and the University of Tromsø – Arctic University of Norway.