



General Information

EUROSPINE, the Spine Society of Europe

c/o Pfister Treuhand AG Bankstrasse 4, 8610 Uster-Zurich, Switzerland

W: www.eurospine.org

Chair of Education Committee

Paulo Pereira

E: educationl@eurospine.org

Director of Education and Research

Julie-Lyn Noël

E: noel@eurospine.org

Education and Research Manager

Angelika Salmen

E: salmen@eurospine.org

Module Chairs

Yu-Mi Ryang, Germany Zdenek Klezl, United Kingdom

Module Faculty

Thomas Blattert*, Germany Lukas Bobinski, Sweden Alberto Diez-Ulloa, Spain Anas Dyab, Luxembourg Esat Kiter, Turkey Sandro Krieg*, Germany Alp Senköylü*, Turkey Felix Tomé Bermejo, Spain

*E-learning only

EduWeek 2024 Overview				
AUTUMN 2023	APRIL - JUNE 2024	24 - 26 JUNE 2024	3-6 SEPTEMBER 2024	
REGISTRATION OPENS Registrations open in early October 2023 Exact date announced on the EUROSPINE website, through newsletters and social media Participants can now register and save their place for Basic and Advanced modules Further details and preliminary programmes are shared on the EUROSPINE website	PART 1 - E-LEARNING Enrolment of participants to the EUROSPINE Learning Management System (LMS) by the Education team Self-paced completion of the module/s by participants Assesment: MCQs that must be passed with a minimum of 70% + CME evaluation Mode of study: online/distance learning through the LMS NO physical presence required	PART 2 - LIVE SESSIONS Live sessions take place at <u>IRCAD</u> in Strasbourg/France Live sessions include, lectures, case based discussions, workshops, group work (and CadLabs/SkillsLabs for designated modules) Participants arrange their own travel/accommodation to/in Strasbourg/France to take part in the modules Assessment: CME evaluation after completion of part 2+3	PART 3 - VIRTUAL LIVE SESSION Bring Your Own Case (BYOC) Participants submit a case prior to the session. Module faculty choose three case that are discussed in breakout groups and facilitated by faculty members. Assesment: CME evaluation after completion of part 2+3 Mode of study: online live via Zoom NO physical presence required	
		Mode of study: <u>in-person</u> Physical presence required	NEW in 2024	



Quick Facts

Live session

Group 1: 25 June 2024 (13:50-18:30 CEST)

DATES & TIMES

Group 2: 26 June 2024 (13:50-18:30 CEST)

Virtual live session

Group 1 and 2: 04 September 2024 (15:00-16:30 CEST)

LIVE SESSION VENUE

IRCAD, 1 Place de l'Hôpital, 67000 Strasbourg, FRANCE

MAX. ATTENDEES 40 delegates (per group)

REGISTRATON EUROSPINE Member: €800 **FEES** Non-member: €1,000

CME CREDITS EACCME accreditation is currently pending.

LANGUAGE English

DRESS CODE Smart casual

A computer (Mac/PC) or tablet (Android/Mac) and stable internet

connection are required to access the e-learning content.

E-LEARNING In preparation for the live session, the mandatory self-paced e-

learning component will be available from 1 April 2024 on the EUROSPINE Learning Management System (LMS). This component

must be completed before the live session.

A module is only deemed as complete when participants have met

ALL of the following conditions:

MODULE COMPLETION

- Passed the e-learning with at least 70% AND
- Attended the live session AND
- Attended the virtual BYOC live session AND
- Submitted the course evaluations for the e-learning and the (virtual) live session component

TARGET AUDIENCE Senior trainees and trained surgeons, who are planning a career in spine surgery.

- Completion of e-learning module is mandatory
- Attendance of the live session and virtual live session is mandatory

IMPORTANT (!)

- Group 1 and 2 contain the same content. Participants are registered for ONE of the groups only!
- Changing groups once registered is NOT possible!



PART 1 - E-learning Programme

(available from 1 April 2024)

Time/ Duration	Topic	Faculty
	Trauma of C-spine, TL-spine & Sacrum	
00:19	Imaging of cervical trauma	Oner
00:29	Trauma of CO-C2: Classification and management	Ryang
00:10	Lower cervical spine injuries	Klezl
00:19	Imaging of thoracic/thoracolumbar trauma	Senköylü
00:14	Classification and management of TL trauma	Oner
00:13	Sacral fractures: classification and management	Kiter
00:20	Knowledge check questions	
Post-Traumatic I	Kyphosis, Metabolic Spine Diseases, Paediatric Trauma 8	& Spinal Cord Injury
00:38	Trauma of spine with ankylosing spondylitis: features & management	Ryang
00:16	Osteoporotic fractures: diagnosis and management	Blattert
00:14	Paediatric spinal fractures	Kiter
00:13	Prevention and management of post-traumatic kyphosis	Senköylü
00:13	Spinal shock and incomplete spinal cord injury syndromes	Krieg
00:20	Knowledge check questions	

PART 2 - Live Session Programme

Group 1 25 June 2024		
13:50-16:00	Cases	
16:00-16:15	Coffee break	
16:15-18:30	Cases	
18:30	End Group 1	

Group 2 26 June 2024		
13:50-16:00	Cases	
16:00–16:15	Coffee break	
16:15–18:30	Cases	
18:30	End Group 2	



Case Based Discussions		
Introduction	Ryang & Klezl	
Topic List Group 1 and 2	Presenter	Expert opinion
Subaxial C-Spine Fracture	ТВС	Klezl
Traumatic C1 Fracture	Ryang	TBC
Multilevel T-L Fractures	Klezl	Kiter
Post Traumatic Kyphosis	TBC	Klezl
Osteoporotic Vertebral Compression Fracture (OVCF)	Ryang	ТВС
Lumbar fracture	Kiter	ТВС
END OF LIVE SESSION		

PART 3 - Virtual Live Session

Bring Your Own Case (BYOC)

04 September 2024 15:00 – 16:30 CEST		
15:00-15:05	Introduction	
15:05-15:25	Breakout session 1	
15:25-15:30	Discussion 1	
15:30-15:50	Breakout session 2	
15:50-15:55	Discussion 2	
15:55-16:00	Break	
16:00-16:20	Breakout 3	
16:20-16:25	Discussion 3	
16:25-16:30	Wrap-up and conclusion	
END OF MODULE		

Learning Outcomes

- Select and interpret appropriate x-ray, computed tomography scan (CT) and magnetic resonance imaging (MRI) in spinal trauma
- Classify fractures of cervical vertebrae (C0-C2), subaxial cervical spine (C-spine), thoracolumbar spine (TL-spine) and sacrum
- Compare surgical and conservative treatment methods at different levels, including C0-C2, subaxial C-spine, TL-spine, and sacrum



- Define special features of conditions including ankylosing spondylitis (AS), osteoporosis and trauma of the immature spine
- Plan how to prevent complications in spinal trauma
- Describe characteristics of spinal shock and spinal cord injury syndromes

Trauma Of C-Spine, TI-Spine & Sacrum

Imaging of Cervical Trauma

- Select appropriate imaging for suspected cervical spinal injury
- Evaluate options for x-ray views
- Select CT and/or MRI as appropriate
- Differentiate between requirements following major and minor cervical spine trauma

Trauma of C0-C2: Classification & Management

- Define the role of ligaments in cervical spine stability
- Classify and relate to treatment
 - Occipital condyle fractures
 - Occipito-cervical dislocation
 - Occipito-atlantal dislocation
 - Axial atlanto-axial instability
 - o Atlas (C1) fracture
 - o Axis (C2) fracture
 - o Traumatic spondylolisthesis C2

Imaging of Thoracic/Thoracolumbar Trauma

- Use the AO classification
- Select appropriate imaging for major and minor trauma
- Assess x-ray images
- Define the indications of CT and MRI as appropriate
- Identify specific conditions with compromised spinal function

Classification and Management of TL Trauma

- Recognise the signs and symptoms of TL spine trauma
- Differentiate Denis, AO and Thoraco-Lumbar Injury Classification and Severity Score (TLICS) classifications
- Explain the role of Posterior Ligamentous Complex (PLC) injuries for burst fractures
- Evaluate surgical techniques in:
 - Anterior surgery including MIS techniques
 - o Posterior surgery including MIS techniques

Sacral Fractures: Classification & Management

- Describe the relevant anatomy
- Differentiate sacral fracture types
- Use the AO classification
- Recognize signs and symptoms of sacral fractures
- Compare surgical vs conservative treatment



Evaluate surgical options

Post-Traumatic Kyphosis, Metabolic Spine Diseases, Paediatric Trauma & Spinal Cord Injury

Trauma of Spine with Ankylosing Spondylitis (AS): Features & Management

- Explain the aetiology of AS
- Define the role of the spine surgeon in AS
- Formulate a surgical management plan for AS fractures
- Anticipate difficulties in this patient population
- Explain what kind of imaging is mandatory and why

Osteoporotic Fractures: Diagnosis & Management

- Define osteoporosis
- Describe medical management of osteoporosis
- Summarize the diagnosis of osteoporotic fractures
- Use the AOSpine osteoporotic fracture classification
- Evaluate surgical options
- Outline the indications for vertebral augmentation procedures
- Outline indications for spinal instrumentation±Vertebral Body Replacement (VBR)

Paediatric Spinal Trauma: Features & Management

- Outline features of the immature cervical and thoracolumbar spine
- Define Spinal cord injury without radiographic abnormality (SCIWORA)/ Cervicothoracic Spinal Cord Injury Without Radiographic Evidence of Trauma (SCIWORET)
- Explain mechanism of:
 - C-spine injury
 - Lumbar apophyseal injuries
- Plan appropriate investigations and management of injuries

Prevention and Management of Post-traumatic Kyphosis

- Discuss the reasons of post traumatic kyphosis
- Formulate therapeutic goals
- Explain how to restore sagittal balance
- Evaluate surgical options
- Justify a multidisciplinary team approach

Spinal Shock and Incomplete SCI Syndromes

- Explain spinal shock and its pathomechanism
- Define the different types of incomplete spinal cord injury
- Classify SCI by using the ASIA impairment scale and explain its clinical and surgical relevance
- Describe the clinical symptoms and pathomechanism of Central Cord Syndrome
- Discuss the importance of timing of surgery
- Explain why there is no role for methylprednisolone in SCI (NASCIS I-III)



Learning Outcomes – Bring Your Own Case (BYOC)

The module concludes with the Bring Your Own Case (BYOC) virtual live session. The BYOC is a case-based learning session based on the participants own practice or experience. Participants will be asked to submit a case on the module topic before the virtual live session.

The cases are ideally the participant's own case and should preferably present questions with no single right answer or dilemmas. The cases could also be from their own departments and ideally, the participant should have had some personal connection or have at least seen the case.

The cases will be shared with assigned faculty preceptors who will process the cases and determine the line-up and order of discussion. Some cases may be grouped with that of other colleagues in discussion.

At the end of the session participants will be able to:

- Synthesise background knowledge and principles on the topic (module name) and apply to their own case and other cases presented
- Identify dilemmas and issues with their own case and other cases presented
- Raise points and questions on their own case and other cases presented
- Defend their positions regarding their own case and cases presented during the discussion
- Recognise and understand diverse perspectives from other participants and faculty
- Assimilate new ideas, new techniques and information, and adopt them appropriately in practice
- Formulate clinical decisions, strategies and generate possible solutions on their own case and other cases presented

Recommended Reading

Part IV Basic Module 4: Spinal Fractures. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach. Switzerland: Springer.

- M. Scholz and F. Kandziora. (2019). Epidemiology & Classification. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 223-232).
 Switzerland: Springer.
- P. Schleichler and F. Kandziora. (2019). Pre-Hospital Management, Physical Examination & Polytrauma Management. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 233-242). Switzerland: Springer.
- S. Krieg. (2019). Spinal Cord Injury. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 243-253). Switzerland: Springer.



- Y. Ryang. (2019). Upper Cervical Spine Trauma. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 253-268). Switzerland: Springer.
- R. Maduri and J. Duff. (2019). Subaxial Cervical Trauma. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 269-274). Switzerland: Springer.
- E. Kiter and N. Ok. (2019). Management Criteria for Thoracic, Thoracolumbar and Lumbar Fractures. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 275-280). Switzerland: Springer.
- Y-P. Charles. (2019). Posterior Surgical Management of Thoracic and Lumbar Fractures. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 281-288). Switzerland: Springer.
- J. Castein and F. Kandziora. (2019). Anterior Surgical Management of Thoracic and Lumbar Fractures. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 289-298). Switzerland: Springer.
- U. Yildiz and F. Kandziora. (2019). Sacral Fractures. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 299-308). Switzerland: Springer.
- M. Wostrack and B. Meyer (2019). Spine Injuries in the Elderly. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 309-318).
 Switzerland: Springer.
- D. Rothenfluh and D. Kieser. (2019). Spinal Trauma in Patients with Ankylosing Spinal Conditions. B. Meyer and M. Rauschmann (Eds.), Spine Surgery A Case-Based Approach (pp. 319-325). Switzerland: Springer.