

(equivalent to the Eurospine Diploma)

MODULE 4: TRAUMA

19 April 2024

Athens Medical Group Amphitheater Kefalari Square, Athens, Greece



ΟΜΙΛΟΣ ΙΑΤΡΙΚΟΥ ΑΘΗΝΩΝ Πάντα ένα βήμα μπροστά!

The Panhellenic Medical Association will grant credit points of Continuing Medical Education (CME-CPD)

Course Manager

Ioannis Magras Professor of Neurosurgery

SCIENTIFIC PROGRAMME

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LEARNING OUTCOMES

MODULE 4

- 1. Select & interpret appropriate x-ray, CT and MRI in spinal trauma
- 2. Classify fractures of CO-2, subaxial C-spine, TL-spine and sacrum
- 3. Compare surgical and conservative treatment methods at different levels, including CO-2, subaxial C,TL and sacrum
- 4. Define special features of conditions including AS, osteoporosis and trauma of the immature spine
- 5. Plan how to prevent complications in spinal trauma
- 6. Describe characteristics of spinal shock and spinal cord injury syndromes

DETAILED LEARNING OUTCOMES: SESSION 1 - TRAUMA CERVICAL SPINE

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 CO-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
- Atlas (C1) fracture
- Axis (C2) fracture
- Traumatic spondylolisthesis C2

Trauma of Subaxial C- Spine: Classification & Management

- Estimate the incidence of and classify using the AO classification
- Use other classifications to determine treatment and prognosis
- Anticipate diagnostic pitfalls
- Evaluate non-surgical management options and when appropriate
- Recognise indications for surgical management
- Emergency
- Urgent
- Elective
- Justify different surgical approaches (anterior vs posterior, combined ant-post or post ant)

SESSION 2 - TRAUMA THORACOLUMBAR SPINE

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

Trauma of TL spine: classification & management

- Recognise the signs and symptoms of TL spine trauma
- Differentiate Denis, AO and TLICS classifications
- Explain the role of PLC for burst fractures, hematological, nutritional and metabolic
- Evaluate surgical techniques in:
- Anterior surgery including MIS techniques
- 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



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Trauma of Spine with Ankylosing Spondylitis and DISH: features & management

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

Osteoporotic Fractures: Classification & Management (Case based Presentation).

- Define osteoporosis
- Describe medical management of osteoporosis
- Summarize the diagnosis of osteoporotic fractures
- Use the AO Spine osteoporotic fracture classification
- Evaluate surgical options
- Outline the indications for vertebral augmentation procedures
- Outline indications for spinal instrumentation ± VBR

SESSION 3 - PAEDIATRIC TRAUMA AND SCI TOPICS

Paediatric Spinal Trauma: features & management

- Outline features of the immature cervical and thoracolumbar spine
- Define SCIWORA/SCIWORET
- Explain mechanism of:
- C-spine injury

- · Lumbar apophyseal injuries
- Plan appropriate investigations and management of injuries

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)

Biomaterials in Spine Surgery

- Evaluate different biomaterial options in spine surgery
- Differentiate between Calcium-phosphate/ Hydroxyapatite act osteoconductive, whereas Bone Morphogenetic Proteins act osteoinductive
- Evaluate the options for cement stabilisation
- Explain the mechanical behaviour of calcium phosphate and BMP

SESSION 4 – POST-TRAUMATIC KYPHOSIS 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



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SCIENTIFIC PROGRAMME

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Saturday, 19 April 2024

08:30 - 09:00	Course Registration & Welcome Coffee
09:00 - 10:30	Session 1: Trauma Cervical Spine
09:00 - 09:10	Introduction F. Kandziora, S. Stavridis
09:10 - 09:30	Imaging of Cervical Trauma A. Karantanas
09:30 - 10:00	Trauma of CO-C2: Classification & Management (Case based Presentation) D. Bouramas
10:00 - 10:30	Trauma of Subaxial C-Spine: Classification & Management (Case based Presentation) A. Athanasiou
10:30 - 11:00	Coffee Break
11:00 - 13:30	Session 2: Trauma Thoracolumbar Spine
11:00 - 11:20	Imaging of Thoracic/Thoracolumbar Trauma A. Karantanas
11:20 - 11:50	Trauma of TL Spine: Classification and management (Case based Presentation) K. Paterakis
11:50 - 12:10	Sacral Fractures: Classification & Management (Case based Presentation) E. Samoladas
12:10 - 12:40	Trauma of Spine with Ankylosing Spondylitis & DISH: Features & Management (Case based Presentation) F. Kandziora
12:40 - 13:00	Osteoporotic Fractures: Diagnosis & Management (Case based Presentation) S. Stavridis
13:00 - 13:30	Discussion
13:30 - 14:30	Lunch Break



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14:30 - 16:00	Session 3: Paediatric Trauma and SCI Topics
14:30 - 14:50	Pediatric Spinal Trauma: Features & Management (Case based Presentation) A. Kapinas
14:50 - 15:10	Spinal Shock & Incomplete Spinal Cord Injury Syndromes P. Tsitsopoulos
15:10 - 15:30	Biomaterials in Spine Surgery A. Brotis
15:30 - 16:00	Participant case presentation
16:00 - 16:30	Coffee Break

16:30 - 17:35	Session 4: Post-Traumatic Kyphosis
16:30 - 17:00	Management of Post-Traumatic Kyphosis (Case based Presentation) F. Kandziora
17:00 - 17:30	Case Discussion F. Kandziora
17:30 - 17:35	Closing remarks
17:35	End of course



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GENERAL INFORMATION

Module Module 4: TRAUMA

Registration Fee

Module 4: 350 euros Module 1 and 4: 600 euros

Date

19 April 2024

Official Language English

Accreditation

The Panhellenic Medical Association grants 14 credit points of Continuing Medical Education (CME-CPD)

Venue

Athens Medical Group Amphitheater Kefalari Square, Athens, Greece

Organization Hellenic Spine Society

Course Secretariat



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