

(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**

# www.dhss.gr



info@mk-premium.com, Tel. +357 99812240 Tel. +30 2310226250, www.mk-premium.com



(equivalent to the Eurospine Diploma)

### Module 4: Trauma 19 April 2024

#### **Course Manager Ioannis Magras** Professor of Neurosurgery

www.dhss.gr

# FACULTY

 CHAIRMEN Kandziora Frank Stavridis Stavros
FACULTY Apostolou Thomas Athanasiou Alkinoos Bouramas Dimosthenis

- Brotis Alexandros Kandziora Frank Kapinas Arion Karantanas Apostolos
- Magras Ioannis
- Paterakis Konstantinos Stavridis Stavros
- Tsitsopoulos Parmenion



(equivalent to the Eurospine Diploma)

### Module 4: Trauma 19 April 2024

#### **Course Manager Ioannis Magras** Professor of Neurosurgery

### www.dhss.gr

### 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



(equivalent to the Eurospine Diploma)

### Module 4: Trauma 19 April 2024

#### Course Manager Ioannis Magras

Professor of Neurosurgery

www.dhss.gr

# 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



(equivalent to the Eurospine Diploma)

## Module 4: Trauma 19 April 2024

**Course Manager Ioannis Magras** Professor of Neurosurgery

#### www.dhss.gr

# SCIENTIFIC PROGRAMME

Module 4: Trauma

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



# Diploma of the Hellenic Spine Society

(equivalent to the Eurospine Diploma)

## Module 4: Trauma 19 April 2024

#### **Course Manager Ioannis Magras** Professor of Neurosurgery

www.dhss.gr

14:30 - 16:00	Session 3: Paediatric Trauma and SCI Topics
14:30 - 14:50	Pediatric Spinal Trauma: Features & Management (Case based Presentation) <b>A. Kapinas</b>
14:50 - 15:10	Spinal Shock & Incomplete Spinal Cord Injury Syndromes <b>P. Tsitsopoulos</b>
15:10 - 15:30	Biomaterials in Spine Surgery <b>A. Brotis</b>
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) <b>F. Kandziora</b>
17:00 - 17:30	Case Discussion <b>F. Kandziora</b>
17:30 - 17:35	Closing remarks
17:35	End of course



(equivalent to the Eurospine Diploma)

# **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**



MK Premium | Congress & Social Events Solutions Vas. Irakliou 47, Gr 54623 | Thessaloniki, Greece Tel.: +30 2310 226 250, +30 2310 219 407 Email: info@mk-premium.com FB: MK-Premium | www.mk-premium.com

### Module 4: Trauma 19 April 2024

Course Manager Ioannis Magras Professor of Neurosurgery

www.dhss.gr



(equivalent to the Eurospine Diploma)

Module 4: Trauma 19 April 2024

**Course Manager Ioannis Magras** Professor of Neurosurgery

www.dhss.gr

# NOTES

### Organised by



**Endorsed by** 

