



Hellenic  
Spine  
Society

# Diploma of the Hellenic Spine Society

(equivalent to the Eurospine Diploma)

## MODULE 1: BASIC COMPREHENSIVE COURSE

**2 December 2022**



Centre for Dissemination of Research Results  
of Aristotle University of Thessaloniki  
(ΚΕ.Δ.Ε.Α.) A.U.TH. | Thessaloniki, Greece

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](http://www.dhss.gr)

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## **FACULTY**

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**CHAIRMAN**      Tsitsopoulos Parmenion

**FACULTY**

- Athanasiou Alkinoos
- Balogiannis Ioannis
- Barkas Konstantinos
- Bouramas Dimosthenis
- Brotis Alexandros
- Kapinas Arion
- Karantanas Apostolos
- Palaiologos Theofilos
- Paterakis Konstantinos
- Starantzis Konstantinos
- Stavridis Stavros
- Tsitsopoulos Parmenion

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## LEARNING OUTCOMES

### MODULE 1

1. Explain the impact of spinal disorders on the individual and society
2. Evaluate a spinal patient with a spine problem
3. Recognise serious and urgent spinal disorders
4. Formulate a plan for the safe early management of emergency and serious spine disorders, based on sound principles of treatment.
5. Demonstrate sound clinical judgment in planning patient management around selected cases

## DETAILED LEARNING OUTCOMES:

### SESSION 1 - GENERAL FEATURES

#### Epidemiology of spine diseases

- Quantify the problem of back pain in the society
- Propose a strategy to reduce spine problems
- Explain research definitions of back pain and study methodology

#### Evidence Based Medicine

- Rank levels of evidence
- Define the needs of individual patients in the context of Evidence Based Medicine
- Explain the risk of bias
- Justify the role of Evidence Based Medicine, guidelines and registries

#### Surgical Anatomy of the Spine

- Understand the most important anatomical features in spine care
- Identify the main anatomical points during surgical spinal approaches

#### Radiology Standards

- Explain risks of exposure to radiation and minimize risks for patients and staff
- Justify the role of the team in evaluating radiological requests and investigations
- Select the most appropriate investigations in spinal Disorders

#### Spine Journals and literature

- Become familiar with the main spine journals
- Acquire ability to perform focused search on spine topics
- Understand and interpret the spine literature

## SESSION 2 - THE FUNCTIONAL SPINE

### Biomechanics

- Outline loads in different positions of the spine
- Explain how loading changes with age and pathology
- Describe the basic principles of biomaterials and biocompatibility

### The Young Spine

- Describe spine growth and growth velocity
- Define specific trauma related factors in the child

### The Old Spine

- Identify common disorders in elderly patients
- Explain the natural history and treatment of fragility fractures of the spine
- Describe the impact of age and co-morbidity on risk assessment and patient safety

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### SESSION 3 - CLINICAL EVALUATION & MEDICAL ETHICS

#### Hints and tips during clinical examination

- Identify actual and potential communication problems within practice
- Assess own strengths and weaknesses in communicating with patients, their families and other team members
- Select appropriate clinical tests for a clinical situation
- Perform a safe and effective clinical examination

#### Warnings during clinical decision making

- Recognise Serious Red Flags during spine care
- Use clinical information to formulate a diagnosis and treatment plan

#### Ethics & Medicolegal Issues

- Apply an ethical framework to critical thinking
- Formulate principles of informed consent
- Identify the main medicolegal issues and how to avoid them in spine practice
- Evaluate organizational and personal factors involved in patient safety

### SESSION 4 - SPINAL EMERGENCIES

#### Evaluation & management principles of spine trauma

- Recognise and document details of a spinal cord injury
- Plan transport, investigation and treatment of a patient with a spinal cord injury
- Anticipate potential complications and how to avoid them
- Plan a simple rehabilitation strategy for a patient with spinal cord injury

#### Incomplete spinal cord injury

- Recognise and investigate an incomplete spinal cord injury
- Formulate a plan for the presurgical management of incomplete spinal cord injury and compression
- Outline the common causes and treatment options of acute spinal cord compression

#### Conus Medullaris & Cauda Equina Syndrome

- Justify the difficulties in proper diagnosis and treatment of conus medullaris and cauda equina syndrome
- Explain the impact of cauda equina syndrome on patient's life

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## SCIENTIFIC PROGRAMME

MODULE 1: BASIC COMPREHENSIVE COURSE FRIDAY, 2 DECEMBER 2022

COURSE ATTENDANCE IS MANDATORY

08:30 - 09:00	Course Registration & Welcome Coffee
<hr/>	
09:00 - 10:20	Session 1: General Features
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09:00 - 09:15	Epidemiology of spine diseases <b>A. Brotis</b>
09:15 - 09:30	Evidence Based principles <b>A. Brotis</b>
09:30 - 09:50	Surgical anatomy of the spine <b>K. Starantzis</b>
09:50 - 10:10	Radiological standards and methods <b>A. Karantanas</b>
10:10 - 10:20	Spine-oriented journals and search of spine literature <b>P. Tsitsopoulos</b>
10.20 - 10.50	Coffee break
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10:50 - 12:10	Session 2: The Functional Spine
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10:50 - 11:05	Biomechanical principles <b>P. Tsitsopoulos</b>
11:05 - 11:20	Biomechanics of spine constructs <b>D. Bouramas</b>
11:20 - 11:35	Peculiarities and specific features of the young spine <b>A. Kapinas</b>
11:35 - 11:50	Peculiarities and specific features of the aged spine <b>P. Zoumpoulis</b>
11:50 - 12:10	Case Discussion <b>Faculty</b>
12.10 - 13.10	Lunch break

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**13:10 - 14:20**      **Session 3: Clinical Evaluation & Medical Ethics**

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13:10 - 13:25      Hints and tips during clinical examination

**K. Barkas**

13:25 - 13:40      Warnings and dilemmas during decision making

**K. Paterakis**

13:40 - 13:55      Ethics & Medicolegal issues

**S. Stavridis**

13:55 - 14:20      Cases Discussion

**Faculty**

14:20 - 14:50      Coffee Break

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**14:50 - 16:00**      **Session 4: Spine Emergencies**

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14:50 - 15:05      Evaluation & management principles of spine trauma

**A. Athanasiou**

15:05 - 15:20      Incomplete spinal cord injury

**T. Palaiologos**

15:20 - 15:35      Conus medullaris & Cauda Equina Syndrome

**I. Balogiannis**

15:35 - 16:00      Cases Discussion

**Faculty**

# ΙΑΤΡΙΚΗ ΠΡΟΟΠΤΙΚΗ

**ΧΕΙΡΟΥΡΓΙΚΑ ΕΡΓΑΛΕΙΑ ΠΟΙΟΤΗΤΑΣ**

**REBSTOCK**  
Precision made in Germany

*Βασ. Όλγας 205  
546 46 Θεσσαλονίκη  
2310-428476  
iatpro@otenet.gr*

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**2 December 2022**

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## GENERAL INFORMATION

### Module

Module 1: BASIC COMPREHENSIVE COURSE

### Registration Fee

Module 1: 300 euros

Module 1 and 4: 500 euros

### Date

2 December 2022

### Official Language:

English

### Accreditation

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

### Venue

Centre for Dissemination of Research Results of Aristotle University of Thessaloniki (KE.D.E.A.) A.U.TH. | Thessaloniki, Greece

### Organization

Hellenic Spine Society

### Course Secretariat



### Premium Congress & Social Events Solutions

Vas. Irakliou 47, Gr 54623 | Thessaloniki, Greece

Tel.: +30 2310 226 250, +30 2310 219 407, fax: +30 2316 009 072

Email: [conference2@premium-events.gr](mailto:conference2@premium-events.gr)

FB: Premium Events | [www.premium-events.gr](http://www.premium-events.gr)



## 2010 - 2021

During a difficult period for our country  
**Athens Medical Group offered its support**  
 with a great sense of responsibility



**€900 M**  
 payroll expenses

**€245 M**  
 foreign currency inflow generated from international patients

**8 M** citizens trusted their health to us

**8 K** fellow citizens have received health services in special rates, or for free

**€350 M**  
 payments to insurance funds

**€630 M**  
 supplies from Greek companies

**500 K** residents of remote areas have used our telemedicine Vodafone services

**40** NGO's, institutions and medical adoption of border areas (e.g. Evros) were included in our CSR program

**€250 M**  
 payments to the Greek Public Sector

**€100 M**  
 investments

**6 K** employees and healthcare professionals

**20** international accreditations according to the highest standards





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MODULE 1: BASIC COMPREHENSIVE COURSE

2 December 2022

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## NOTES

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Hellenic  
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## MODULE 4: TRAUMA

**3 December 2022**



Centre for Dissemination of Research Results  
of Aristotle University of Thessaloniki (KE.D.E.A.)  
A.U.TH., Thessaloniki, Greece

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## SCIENTIFIC PROGRAMME

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**MODULE 4: TRAUMA**  
**3 December 2022**

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

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## **FACULTY**

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### **CHAIRMEN**

Kandziora Frank  
Stavridis Stavros

### **FACULTY**

Apostolou Thomas  
Athanasίου Alkinoos  
Bouramas Dimosthenis  
Brotis Alexandros  
Kandziora Frank  
Kapinas Arion  
Karantanas Apostolos  
Magras Ioannis  
Paterakis Konstantinos  
Stavridis Stavros  
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## LEARNING OUTCOMES

### MODULE 4

1. Select & interpret appropriate x-ray, CT and MRI in spinal trauma
2. Classify fractures of C0-2, subaxial C-spine, TL-spine and sacrum
3. Compare surgical and conservative treatment methods at different levels, including C0-2, 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 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
- 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

Module 4: Trauma

**Saturday, 3 December 2022**

08:30 - 09:00	Course Registration & Welcome Coffee
09:00 - 10:30	<b>Session 1: Trauma Cervical Spine</b>
09:00 - 09:10	Introduction <b>Frank Kandziora, Stavros Stavridis</b>
09:10 - 09:30	Imaging of Cervical Trauma <b>Apostolos Karantanas</b>
09:30 - 10:00	Trauma of CO-C2: Classification & Management (Case based Presentation) <b>Dimos Bouramas</b>
10:00 - 10:30	Trauma of Subaxial C-Spine: Classification & Management (Case based Presentation) <b>Alkinoos Athanasiou</b>
10:30 - 11:00	Coffee Break
11:00 - 13:30	<b>Session 2: Trauma Thoracolumbar Spine</b>
11:00 - 11:20	Imaging of Thoracic/Thoracolumbar Trauma <b>Apostolos Karantanas</b>
11:20 - 11:50	Trauma of TL Spine: Classification and management (Case based Presentation) <b>Konstantinos Paterakis</b>
11:50 - 12:10	Sacral Fractures: Classification & Management (Case based Presentation) <b>Thomas Apostolou</b>
12:10 - 12:40	Trauma of Spine with Ankylosing Spondylitis & DISH: Features & Management (Case based Presentation) <b>Frank Kandziora</b>
12:40 - 13:00	Osteoporotic Fractures: Classification & Management (Case based Presentation) <b>Stavros Stavridis</b>
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**

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14:30 - 14:50      Pediatric Spinal Trauma: Features & Management (Case based Presentation)

**Arion Kapinas**

14:50 - 15:10      Spinal Shock & Incomplete Spinal Cord Injury Syndromes

**Parmenion Tsitsopoulos**

15:10 - 15:30      Biomaterials in Spine Surgery

**Alexandros Brotis**

15:30 - 16:00      Participant case presentation

16:00 - 16:30      Coffee Break

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**16:30 - 17:35**      **Session 4: Post-Traumatic Kyphosis**

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16:30 - 17:00      Management of Post-Traumatic Kyphosis (Case based Presentation)

**Frank Kandziora**

17:00 - 17:30      Case Discussion

**Frank Kandziora**

17:30 - 17:35      Closing remarks

17:35                End of course



# ΙΑΤΡΙΚΗ ΠΡΟΟΠΤΙΚΗ

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Module 1 and 4: 500 euros

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English

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## 2010 - 2021

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**Organised by**  


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