

Organized by:



Endorsed by:



Spanish & Portuguese Spine Societies

COURSE DIPLOMA

2021

Module 4

Module 4:

—

Trauma

When:

—

15 // October // 2021

Where:

—

Lisbon - Portugal

Table of Content

Module 4 Trauma

Quick Facts	3
Learning Outcomes // Module 4	4
Learning Outcomes // Trauma Of C-Spine, Tl-Spine & Sacrum	5
Learning Outcomes // Post-Traumatic Kyphosis, Metabolic Spine Diseases, Paediatric Trauma & Spinal Cord Injury	7
Learning Outcomes // Case Based Discussion	9
Course Chairperson & Faculty	10
Scientific Programme // Module 4	11
Recommended Reading	12
Contacts	14

Scientific Content

-

Dr. Manuel Tavares de Matos

Quick Facts

When	15 October 2021
Where	Lisbon / Portugal Course: Lusíadas Hospital Rua Abílio Mendes, 12
Maximum Attendees	40 delegates
Registration Fee	Discount fee for SPPCV/GEER members Module 4: 800€ for Members / 1000€ for Non Members
CME Credits	An application has been made to the UEMS EACCME® for CME accreditation of this event
Language	English
Dress	Casual
Important Note	Attendance at every session is mandatory; A final exam will be performed; The course evaluation is mandatory to obtain the CME certificate; This will be a paperless course and no printed programme will be provided.

Target Audience

Senior trainees and trained surgeons, who are planning a career in spinal surgery.

Learning Outcomes:

Module 4

Trauma

- 1. Select and interpret appropriate x-ray, computed tomography scan (CT) and magnetic resonance imaging (MRI) in spinal trauma**
- 2. Classify fractures of cervical vertebrae (C0-C2), subaxial cervical spine (C-spine), thoracolumbar spine (TL-spine) and sacrum**
- 3. Compare surgical and conservative treatment methods at different levels, including C0-C2, subaxial C-spine, TL-spine, and sacrum**
- 4. Define special features of conditions including ankylosing spondylitis (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**

Learning Outcomes:

Trauma Of C-Spine, Tl-Spine & Sacrum

- 1. Imaging of Cervical Trauma**
- 2. Trauma of C0-C2: Classification & Management**
- 3. Imaging of Thoracic/Thoracolumbar Trauma**
- 4. Classification and Management of TL Trauma**
- 5. Sacral Fractures: Classification & Management**

1. 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

2. 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

3. 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

4. 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
 - Posterior surgery including MIS techniques

5. 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

Learning Outcomes:

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

1. Trauma of Spine with Ankylosing Spondylitis (AS): Features & Management
2. Osteoporotic Fractures: Diagnosis & Management
3. Paediatric Spinal Trauma: Features & Management
4. Prevention and Management of Post-traumatic Kyphosis
5. Spinal Shock and Incomplete SCI Syndromes

1. 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

2. 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)

3. 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

4. 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

5. 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:

Case Based Discussion

Course Chairperson:

Manuel Tavares de Matos PORTUGAL

Antonio Martín Benlloch SPAIN

Course Faculty:

Angel Escarnez Pérez SPAIN

Angel Piñera Parrilla SPAIN

António Martin Benlloch SPAIN

Bruno Santiago PORTUGAL

Carla Reizinho PORTUGAL

João Maia Gonçalves PORTUGAL

Jorge Alves PORTUGAL

Manuel Tavares de Matos PORTUGAL

Máximo-Alberto Díez Ulloa SPAIN

Pedro Varanda PORTUGAL

Susana Nuñez Pereira SPAIN

Scientific Programme

Module 4

Time	Topic	Faculty
-	-	-
08.00	Course Registration and welcome coffee	-
-	-	-
	Trauma of C-spine, TL-spine & Sacrum	
08.30 - 08.50	Imaging of cervical trauma	Angel Piñera Parrilla
08.50 - 09.10	Trauma of CO-C2: Classification and management	Bruno Santiago
09.10 - 09.30	Lower cervical spine injuries	Susana Nuñez Parilla
09.30 - 09.50	Imaging of thoracic/thoracolumbar trauma	Angel Escamez Pérez
09.50 - 10.10	Classification and management of TL trauma	Pedro Varanda
10.10 - 10.30	Sacral fractures: classification and management	Jorge Alves
10.30 - 10.45	Knowledge check questions	All
-	-	-
10.45 - 11.00	Coffee Break	-
-	-	-
	Post-Traumatic Kyphosis, Metabolic Spine Diseases, Paediatric Trauma & Spinal Cord Injury	
11.00 - 11.20	Trauma of spine with ankylosing spondylitis: features & management	Alberto Ulloa
11.20 - 11.40	Osteoporotic fractures: diagnosis and management	Maia Gonçalves
11.40 - 12.00	Paediatric spinal fractures	Susana Nuñez Pereira
12.00 - 12.20	Prevention and management of post-traumatic kyphosis	Tavares de Matos
12.20 - 12.40	Spinal shock and incomplete spinal cord injury syndromes	Carla Reizinho
12.40 - 13.00	Knowledge check questions	All
-	-	-
13.00 - 14.00	Lunch	-
-	-	-
	Case Based Discussion	
14.00 - 14.40	Subaxial C-Spine Fracture	case 1 Pedro Varanda
	Subaxial C-Spine Fracture	case 2 Susana Nuñez Parrilla
14.40 - 15.20	Upper C-Spine injury	case 1 Bruno Santiago
	Upper C-Spine injury	case 2 Antonio Martin Belloch
15.20 - 15.40	Multilevel T-L Fractures	Jorge Alves
-	-	-
15.40 - 16.10	Coffee Break	-
-	-	-
16.10 - 16.30	Pseudoarthrosis after Type B3	Alberto Ulloa
16.30 - 16.50	Osteoporotic Vertebral Compression Fracture (OVCF)	Tavares de Matos
16.50 - 17.10	Lumbar Fracture Case	Angel Escamez Pérez
17.10 - 17.20	TL Fractures case	Angel Piñera Parrilla
17.20 - 17.30	Course Summary	Tavares de Matos
17.30 - 18.00	Conclusions, Diploma and Mandatory Course Evaluation	-
-	-	-
	End of Module	
-	-	-

Course Attendance is Mandatory

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.**

Contacts

Course Organisation

SPPCV Sociedade Portuguesa de Patologia da Coluna Vertebral

Portuguese Spine Society

-

Cristiana Mota

sppcv_secretariado@yahoo.com

T: +351 96 253 9452

GEER Sociedad Española de Columna Vertebral

Spanish Spine Society

-

Mari Cruz Berruezo

Silvia Núñez

secretaria@geeraquis.org

T. +34 95 244 5586

Scientific Content

-

Dr. Manuel Tavares de Matos

EUROSPINE, the Spine Society of Europe:

-

Seefeldstrasse 16

8610 Uster

Switzerland

www.eurospine.org

SPPCV Sociedade Portuguesa de Patologia da Coluna Vertebral

Portuguese Spine Society

-

Escritório nº E03 Estrada de São Bartolomeu, 169

1750-276 Lisboa

Portugal

www.sppcv.org

GEER Sociedad Española de Columna Vertebral

Spanish Spine Society

-

Av. García Lorca s/n. Edf. Club Municipal de Hielo

29630 Benalmádena, Málaga

España

www.geeraquis.org

Thank you for your participation.

Spanish & Portuguese Spine Societies
COURSE DIPLOMA
Module 4: Trauma
2021

Organized by:



SPPCV
SOCIEDADE
PORTUGUESA
DE PATOLOGIA
DA COLUNA
VERTEBRAL

Endorsed by:

