

Madrid, Spain
13-14 November 2019

GEER

Spanish Spine Society


SPPCV
SOCIEDADE
PORTUGUESA
DE PATOLOGIA
DA COLUNA
VERTEBRAL

Spanish & Portuguese Spine Societies Course Diploma

Module 3

Spinal Deformities

PROGRAMME

Endorsed by

 **EURO
SPINE**



The Module 3 Spinal Deformities Course Diploma, Madrid, Spain, 13/11/2019 - 14/11/2019 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 12 European CME credits (ECMEC®s).

Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Programme

QUICK FACTS

WHEN:

13-14 November 2019

WHERE:

Madrid. Spain

Course Venue:

Hotel AC La Finca
Pº del Club Deportivo, 1. Ed. 17
Parque empresarial La Finca
Pozuelo de Alarcón, 28223 Madrid

Cad-Lab Workshops:

Universidad Francisco de Vitoria
Carretera Pozuelo a Majadahonda, Km 1.800
Pozuelo de Alarcón, 28223 Madrid

REGISTRATION FEE:

800 € for Members

1000 € for Non Members

Discounts for GEER and SPCCV members are available. *Modules with a discount structure of 10% for 2 modules and 15% for 3 modules*

MAXIMUM ATTENDEES:

30 delegates

CME CREDITS:

Has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 12 European CME credits (ECMEC®s)

LANGUAGE:

English, Spanish and Portuguese (*The speaking is in Spanish or Portuguese, but the slides are in English, live discussions are also in Spanish-Portuguese without translation available*)

DRESS:

Casual

IMPORTANT NOTE:

- Attendance at every session is mandatory
- A wireless Internet device (mobile phone/lpad/Computer) will be required to access on-line resources during the programme, please bring one with you

COURSE CHAIRMEN



Rafael González Díaz
Spain



Jorge Mineiro
Portugal

COURSE FACULTY

Jorge Alves
Julio Domenech Fernández
David Farrington Rueda
Pedro Fernandes
Nicomedes Fernández-Baillo
Simón Fuentes Caparrós
Rafael González Díaz
Raquel Lax Pérez
Antonio Martín Benlloch
Jorge Mineiro
Sonia Muñoz Donat
Jose Ramírez Villaescusa
Felisa Sánchez Mariscal Díaz
José Miguel Sánchez Márquez
Bruno Santiago
Diego Valverde Belda
Inmaculada Vilalta Vidal

CAD LAB CHAIRMEN

- **Rafael González Díaz. Spain**
- **Felisa Sánchez-Mariscal Díaz. Spain**

TARGET AUDIENCE

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

FACE-TO-FACE MODULE

**LEARNING OUTCOMES
SESSION 1
PRINCIPLES OF SPINAL DEFORMITY**

SPINAL ALIGNMENT AND BALANCE

- Goals of surgery in the spinal deformity continuum
- Understand the concepts of alignment vs balance
- Know key spino-pelvic parameters and their limitations
- Understand the concept of spinal harmony
- Know compensation mechanisms

CASTING, BRACING AND THE ROLE OF REHABILITATION

- Justify the role of casting today
- Explain the pros and cons of different types of brace treatment
- Formulate principles of rehabilitation for patients with spine deformity, paediatric and adult
- Define the role of halo traction as definitive or interim treatment

PREOPERATIVE ASSESSMENT AND POSITIONING

- Record a comprehensive preoperative assessment
- Consider special issues including pulmonary, cardiac, hematological, nutritional and metabolic
- Position patients safely
- Explain the rationale to other team members
- Compare the purpose of prone, lateral and supine positions

INTRAOPERATIVE MONITORING

- Select appropriate types of monitoring
- Differentiate between SEP and MEP
- Perform a safe and reliable wake up test
- Recognise when a wake up test is required
- Respond appropriately when monitoring indicates intervention required

BLOOD SAVING

- Anticipate the factors affecting blood loss
- Recognize trigger points for transfusion
- Minimise the risks of homologous transfusion
- Outline the role of erythropoietin
- Compare the pros and cons of autologous transfusion, haemodilution, hypotensive anaesthesia, anti-fibrinolytic agents, intraoperative blood salvage

LEARNING OUTCOMES SESSION 2

ADOLESCENT IDIOPATHIC SCOLIOSIS

PATHOGENESIS AND NATURAL HISTORY OF AIS

- Know concepts of development of AIS and subsequent implications for surgical treatment
- Describe the natural history of AIS

CLASSIFICATION AND SURGICAL INDICATIONS

- Know the pertinent classification systems and their limitations
- Understand and formulate surgical indications
- Goals of surgery for AIS

SELECTION OF FUSION LEVELS

- Use classification to determine the end limits of fusion (Lenke)
- Understand factors which may determine fusion levels such as curve flexibility, adding on etc.
- Define the lower and upper limit of instrumentation

SURGICAL STRATEGY: POSTERIOR APPROACH

- Formulate principles of surgical correction of AIS
- Understand the role of the sagittal plane in AIS and for surgical correction
- Evaluate strategic surgical options
- Recognise indications for a posterior or combined approach

SURGICAL STRATEGY: ANTERIOR APPROACH

- Differentiate between anterior release, anterior fusion and anterior instrumentation
- Select appropriate approach for procedure
- Recognise indications for
 - anterior approach
 - anterior instrumentation



LEARNING OUTCOMES SESSION 3 SCOLIOSIS AND KYPHOSIS

NEUROMUSCULAR SCOLIOSIS

- Describe the aetiology and prognostic factors associated with neuromuscular scoliosis
- Identify factors indicating progression or risk to neurological structures
- Evaluate management options
- Assess associated pulmonary and cardiac problems

CONGENITAL AND EARLY ONSET SCOLIOSIS (INCLUDING GROWING RODS)

- Relate the stages of development to deformities of the spinal cord
- Select appropriate investigations
- Evaluate treatment options

HYPERKYPHOSIS (CONGENITAL, SCHEUERMANN, ANKYLOSING SPONDYLITIS...)

- Differentiate between the aetiology and prognostic factors associated with regular and angular kyphosis
- Evaluate management options

LEARNING OUTCOMES SESSION 4 SPONDYLOLISTHESIS

PATHOGENESIS AND CLASSIFICATION

- Describe the pathogenesis and causes of developmental spondylolisthesis
- Differentiate between high- and low-grade spondylolisthesis
- Know current classification systems

SPONDYLOLYSIS, LOW-GRADE OLISTHESIS

- Understand patho-anatomic features
- Know surgical indications
- Select appropriate surgical technique

HIGH-GRADE SPONDYLOLISTHESIS

- Describe the patho-anatomy of high-grade spondylolisthesis
- Differentiate between balance and unbalanced olisthesis
- Know different surgical technique
- Understand the pros and cons of reduction vs. in situ fusion

LEARNING OUTCOMES SESSION 5 CAD LAB PREPARATION

PEDICLE SCREW GUIDANCE IN DEFORMITY

- Assess appropriate placement
- Minimise the risk of misplacement
- Balance the pros and cons of spinal navigation
- Assess the advantages and disadvantages of freehand probing

SACRO-PELVIC FIXATION

- Choose different options of sacro-pelvic fixation
- Describe surgical technique for CadLab

LEARNING OUTCOMES SESSION 6 CADAVER LABS

CAD LAB 1: ILLIO-SACRAL FIXATION: ILLIO-SACRAL SCREW PLACEMENT

- Identify key structures of the lumbo-sacral anatomy
- Identify the S1 screw entry points
- Relate anterior vascular structures and screw placement
- Prepare iliac screw holes
- Integrate safety measures and assess risks
- Place iliac instrumentation and connect to the lumbo-sacral construct

CAD LAB 2: THORACIC PEDICLE SCREW FIXATION & HYBRID SOLUTIONS

- Approach the posterior thoracic spine
- Identify anatomical screw entry points
- Anticipate the risks and pitfalls
- Perform free hand technique to prepare a screw hole
- Check integrity of screw hole by pedicle probe
- Place pedicle screw
- Prepare facet joint and place pedicle hook
- Place transverse process and lamina hooks



LEARNING OUTCOMES SESSION 7 ADULT SPINAL DEFORMITY

FROM THE DEGENERATIVE SPINE TO ADULT DEFORMITY

- Evaluate the lumbar spine in the context of spinal deformity
- Classify the continuum from the degenerative spine to deformity

ADULT IDIOPATHIC AND DEGENERATIVE DEFORMITIES

- Identify common problems associated with adult deformity
- Differentiate between idiopathic and degenerative (de novo) deformity
- Use spino-pelvic parameters to assess degenerative deformities
- Evaluate operative and non-operative options for different age groups
- Consider comorbidities associated with age
- Define surgical indications
- Assess patient expectation

PLANNING OF SURGICAL CORRECTION

- Formulate principles of surgical correction
- Plan surgical correction of adult spinal deformity
- Know current software planning tools
- Evaluate the appropriate techniques

SPINAL OSTEOTOMIES

- Justify the aim of osteotomy
- Differentiate between the different types of osteotomy (focus on posterior column and pedicle subtraction osteotomies, VCR and en bloc for advanced course)
- Technique of spinal osteotomies
- Outcomes and complications of spinal osteotomies

ANTERIOR-POSTERIOR TECHNIQUES

- Recognise indications for an anterior/lateral or combined with posterior approach
- Describe the amount of correction that can be achieved with each technique
- Know outcomes and complications of the different techniques/approach

Module 3: Spinal Deformities Scientific Programme

Chairmen: Rafael González Díaz & Jorge Mineiro

Course attendance is mandatory

DAY 1. WEDNESDAY, 13 NOVEMBER

TIME	TOPIC	FACULTY
08:00-08:20	Course Registration	
08:20-08:35	Introduction	Jorge Mineiro
SESSION 1: PRINCIPLES OF SPINAL DEFORMITY AND SURGICAL TREATMENT		
08:35-08:50	Spinal Alignment and Balance	Felisa Sánchez Mariscal Díaz
08:50-09:10	Casting, Bracing and Role of Rehabilitation	José Miguel Sánchez Márquez
09:10-09:25	Preoperative Assessment and Positioning	Jorge Alves
09:25-09:40	Intraoperative Monitoring	Bruno Santiago
09:40-09:50	Blood Saving	Sonia Muñoz Donat
09:50-10:00	Discussion	All Faculty
10:00-10:30	Coffee Break	
SESSION 2: ADOLESCENT IDIOPATHIC SCOLIOSIS		
10:30-10:45	Pathogenesis and Natural History of AIS	Jorge Alves
10:45-10:55	Classification and Surgical Indications	Jose Miguel Sánchez Márquez
10:55-11:05	Selection of Fusion Levels	Inmaculada Vilalta Vidal
11:05-11:20	Surgical Strategy: Posterior Approach	Rafael González Díaz
11:20-11:35	Surgical Strategy: Anterior Approach	Jorge Mineiro
11:35-11:45	Discussion	All Faculty
11:45-12:30	Case-Based Discussion	Raquel Lax Pérez
12:30-13:30	Lunch	
SESSION 3: SCOLIOSIS AND KYPHOSIS		
13:30-13:50	Neuromuscular Scoliosis	Simón Fuentes Caparrós
13:50-14:10	Congenital and Early Onset Scoliosis (Including Growing Rods)	David Farrington Rueda
14:10-14:25	Hyperkyphosis (Congenital, Scheuermann, Ankylosing Spondylitis)	Jorge Mineiro
14:25-14:40	Surgical Strategy for Correcting Hyperkyphosis	Nicomedes Fernández-Baillo
14:40-14:50	Discussion	All Faculty
14:50-15:20	Case-Based Discussion	Jorge Alves
15:20-15:50	Coffee Break	
SESSION 4: SPONDYLOLISTHESIS		
15:50-16:05	Pathogenesis and Classification	Julio Domenech Fernández
16:05-16:20	Spondylolysis and Low-Grade Olisthesis	Bruno Santiago
16:20-16:35	High-Grade Spondylolisthesis	Rafael González Díaz
16:35-16:45	Discussion	All Faculty
16:45-17:30	Case-Based Discussion	Diego Valverde Belda
SESSION 5: CAD LAB PREPARATION		
17:30-17:45	Pedicle Screw Guidance in Deformity	Simón Fuentes Caparrós
17:45-18:00	Sacro-Pelvic Fixation	Antonio Martin Benlloch

END OF DAY 1



Course attendance is mandatory

DAY 2. THURSDAY, 14 NOVEMBER

TIME	TOPIC	FACULTY
09:00	Attendance Signature and Coffee	
SESSION 6: ADULT SPINAL DEFORMITY		
09:30-09:50	From Degenerative to Adult Deformity	Pedro Fernandes
09:50-10:10	Adult Idiopathic and Degenerative Deformities	Felisa Sánchez Mariscal Díaz
10:10-10:30	Planning of Surgical Correction	Jose Ramírez Villaescusa
10:30-10:50	Spinal Osteotomies	Nicomedes Fernández-Baillo
10:50-11:10	Anterior-Posterior Techniques	Pedro Fernandes
11:10-11:30	Discussion	All Faculty
11:30-12:00	Closing Remarks, Diploma and Mandatory Course Evaluation	Rafael González Díaz
12:00-13:00	Lunch	
13:00-13:30	Shuttle bus service to Universidad Francisco de Vitoria	
SESSION 7: CADAVER LABS		
13:30-13:45	Go to the Lab	
13:45-15:30	Group A: Pedicle Screw Guidance in Deformity	All Faculty
13:45-15:30	Group B: Sacro-Pelvic Fixation	All Faculty
15:30-16:00	Coffee Break	
16:00-17:45	Group B: Pedicle Screw Guidance in Deformity	All Faculty
16:00-17:45	Group A: Sacro-Pelvic Fixation	All Faculty

END OF MODULE

Sponsors



Course Organisation

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