

DATOS BÁSICOS DE LA GUÍA DOCENTE:

Materia:	FISIOTERAPIA EN ESPECIALIDADES CLÍNICAS II		
Identificador:	30387		
Titulación:	GRADUADO EN FISIOTERAPIA. PLAN 2009 (BOE 15/10/2011)		
Módulo:	FISIOTERAPIA EN ESPECIALIDADES CLINICAS		
Tipo:	OBLIGATORIA		
Curso:	3	Periodo lectivo:	Segundo Cuatrimestre
Créditos:	6	Horas totales:	150
Actividades Presenciales:	53	Trabajo Autónomo:	97
Idioma Principal:	Inglés	Idioma Secundario:	Castellano
Profesor:		Correo electrónico:	

PRESENTACIÓN:

The subject Physiotherapy in Clinical Specialties II aims to provide the students with basic knowledge for the treatment of myofascial pain syndrome in order to be applied for different populations and pathologies. This subject aims to develop students' competences in order to allow them to integrate specific myofascial pain treatment techniques along with the rest of the techniques studied during the Physiotherapy Degree. In this subject, teaching methodology combines master classes that provide basic knowledge that the student has to handle, together with methodologies that improve clinical reasoning and problem solving skills so that the student can integrate and apply his/ her clinical knowledge more effectively.

All this theoretical content and clinical reasoning will be coordinated with workshops to allow students to develop their practical skills, as well as with activities oriented to help students to communicate with their patients in this specific area of knowledge.

COMPETENCIAS PROFESIONALES A DESARROLLAR EN LA MATERIA:

Competencias Generales de la titulación	G01	Capacidad de análisis y síntesis de las informaciones obtenidas de diversas fuentes, con el objetivo de proporcionar una atención fisioterapéutica eficaz centrada en la asistencia integral a los pacientes/ usuarios
	G02	Resolución creativa y eficaz de los problemas que surgen en la práctica diaria, con el objetivo de garantizar los niveles máximos de calidad de la labor profesional realizada
	G03	Capacidad de organización y planificación de la labor fisioterapéutica
	G04	Uso de las tecnologías de la información y la comunicación para la aproximación a las necesidades de los pacientes/ clientes y para el diseño, aplicación y evaluación de los tratamientos
	G08	Capacidad de aplicar los conocimientos adquiridos
Competencias Específicas de la titulación	E17	Conocer y aplicar las bases teóricas y el desarrollo de los métodos y procedimientos fisioterapéuticos
	E18	Tener la capacidad de valorar desde la perspectiva de la fisioterapia, el estado funcional del paciente/ usuario, considerando los aspectos físicos, psicológicos y sociales del mismo.
	E19	Comprender y aplicar los métodos y procedimientos manuales e instrumentales de valoración en Fisioterapia y Rehabilitación Física, así como la evaluación científica de su utilidad y efectividad
	E22	Identificar el tratamiento fisioterapéutico más apropiado en los diferentes procesos de alteración, prevención y promoción de la salud así como en los procesos de crecimiento y desarrollo
Profesiones reguladas	P07	Diseñar el plan de intervención de fisioterapia atendiendo a criterios de adecuación, validez y eficiencia
	P08	Ejecutar, dirigir y coordinar el plan de intervención de fisioterapia, utilizando las herramientas terapéuticas propias y atendiendo a la individualidad del usuario
	P09	Evaluar la evolución de los resultados obtenidos con el tratamiento en relación con los objetivos marcados
	P10	Elaborar el informe de alta de los cuidados de fisioterapia una vez cubiertos los objetivos propuestos
	P19	Comunicarse de modo efectivo y claro, tanto de forma oral como escrita, con los usuarios del sistema sanitario así como con otros profesionales
Resultados de Aprendizaje	R01	To know the physiopathology of myofascial trigger points and the clinical characteristics of myofascial pain syndrome

R02	To identify and properly assess myofascial pain
R03	To properly prescribe and use the different conservative and invasive techniques for myofascial pain treatment
R04	To recognize and identify the different activating and perpetuating factors of myofascial pain syndrome as well as to carry out an adequate proposal to eliminate these factors
R05	To know the indications and contraindications, therapeutic effects and existing evidence about new trends in dry needling

REQUISITOS PREVIOS:

In order to ensure a good understanding of the subject, the student must have good palpating skills and functional anatomy knowledge. Also, the student must know the basic neurophysiology of pain.

The student will be best able to take advantage of this subject and improve clinical integration skills if he/ she has attended the following subjects:

Clinical Interview Workshop

Physiotherapy Evaluation

Specific physiotherapy intervention methods II (locomotor)

General physiotherapy procedures II

Physiotherapy in clinical specialties I

PROGRAMACIÓN DE LA MATERIA:

Observaciones:

The subject will be structured in the following parts:

Unit I: Theory. The objective will be to provide the students with the theory and the background of myofascial pain and invasive therapies, allowing them to understand the main concepts and promote critical and clinical thinking.

Unit II. Practical workshops. In these workshops, students will work in pairs and will have the opportunity to practice the conservative and invasive treatments in the selected MTrPs.

Unit III: Special seminars will be organized with the objective to show some innovative uses of traditional dry needling approaches, as well as linking them to the clinical practice.

Another part in the subject, transversal to all parts will be to develop a video about a topic from a list proposed by the lecturers.

Contenidos de la materia:

1 - Myofascial Trigger Points (MTrP) and Myofascial Pain Syndrome (MPS)
1.1 - Introduction and characteristics of Myofascial Trigger Points (MTrPs) and Myofascial Pain Syndrome (MPS)
1.1.1 - The concept of Myofascial Trigger Point (MTrP) and Myofascial Pain Syndrome (MPS)
1.1.2 - Integrated Hypothesis
1.1.3 - Current theories about MTrP: analysis of the different theories from the available scientific evidence
1.1.4 - The nature of MTrP
1.1.5 - Characteristics of MTrP
1.1.6 - Classification of MTrP: active and latent
1.2 - MPS diagnosis and assessment
1.2.1 - Diagnostic criteria of MTrP
1.2.2 - MTrP Exploration
1.2.3 - The MPS: differential diagnosis
1.2.4 - Patient Assessment

1.3 - Activating and perpetuating factors
1.4 - Conservative treatment of MPS
1.5 - Invasive treatment of MPS
1.5.1 - Mechanisms of action of superficial and deep dry needling
1.5.2 - Evidence-based dry needling
1.5.3 - Indications and contraindications of dry needling. Areas of risk.
1.5.4 - Dry needling needles: characteristics and dimensions
1.5.5 - Considerations prior to dry needling
1.5.6 - Considerations during dry needling treatment
1.5.7 - Legal considerations about dry needling
2 - Conservative and invasive treatment of myofascial trigger points
2.1 - Diacutaneous Fibrolysis
2.2 - Infraspinatus Muscle
2.2.1 - Activating and perpetuating factors
2.2.2 - Referred pain patterns
2.2.3 - Conservative treatment
2.2.4 - Algometry practice
2.2.5 - Superficial and Deep Dry Needling
2.3 - Gastrocnemius Muscle
2.3.1 - Activating and perpetuating factors
2.3.2 - Referred pain patterns
2.3.3 - Conservative treatment
2.3.4 - Deep dry needling of gastrocnemius muscle. Flat and pincer needling
2.4 - Peroneus Muscle
2.4.1 - Activating and perpetuating factors
2.4.2 - Referred pain patterns
2.4.3 - Deep dry needling of Peroneus
2.5 - Sternocleidomastoid muscle
2.5.1 - Activating and perpetuating factors
2.5.2 - Referred pain patterns
2.5.3 - Pincer palpation. Identification of the taut band and the MTrP. Provocation of LTR
2.5.4 - Conservative treatment
2.6 - Extensor digitorum communis muscle
2.6.1 - Activating and perpetuating factors
2.6.2 - Referred pain patterns
2.6.3 - Conservative treatment
2.6.4 - Deep dry needling of Extensor digitorum communis muscle
2.7 - Quadratus lumborum muscle
2.7.1 - Activating and perpetuating factors
2.7.2 - Referred pain patterns
2.7.3 - Conservative treatment
2.7.4 - Deep dry needling of Quadratus Lumborum
2.8 - Iliopsoas muscle
2.8.1 - Activating and perpetuating factors
2.8.2 - Referred pain patterns
2.8.3 - Conservative treatment
2.9 - Quadriceps muscle
2.9.1 - Activating and perpetuating factors
2.9.2 - Referred pain patterns
2.9.3 - Conservative treatment
2.9.4 - Deep dry needling of quadriceps
2.10 - Scaleni muscles
2.10.1 - Activating and perpetuating factors
2.10.2 - Referred pain patterns
2.10.3 - Deep dry needling of scaleni muscles
2.11 - Hamstrings muscles
2.11.1 - Activating and perpetuating factors
2.11.2 - Referred pain patterns

2.11.3 - Deep dry needling of Hamstrings
2.12 - Gluteus medius and minimus muscle
2.12.1 - Activating and perpetuating factors
2.12.2 - Referred pain patterns
2.12.3 - Conservative treatment
2.12.4 - Deep dry needling of gluteus medius and minimus
2.13 - Trapezius and levator scapulae muscles
2.13.1 - Activating and perpetuating factors
2.13.2 - Referred pain patterns
2.13.3 - Conservative treatment
2.13.4 - Deep dry needling of trapezius muscle
3 - New trends in dry needling
3.1 - Percutaneous electrolysis
3.2 - Dry Needling for Hypertonia and Spasticity (DNHS technique)
3.3 - Percutaneous Neuromodulation

La planificación de la asignatura podrá verse modificada por motivos imprevistos (rendimiento del grupo, disponibilidad de recursos, modificaciones en el calendario académico, etc.) y por tanto no deberá considerarse como definitiva y cerrada.

METODOLOGÍAS Y ACTIVIDADES DE ENSEÑANZA Y APRENDIZAJE:

Metodologías de enseñanza-aprendizaje a desarrollar:

Teaching-learning methodologies will change depending on the unit:

1 - Introduction to Myofascial trigger points (MTrPs) and myofascial pain syndrome (MPS).

The methodology of Unit I will consist of online master classes in order to present the theoretical content of the subject. The classes will be very interactive and the student will have participate in different activities that the lecturer will propose.

2 - Conservative and invasive treatment of myofascial trigger points.

The methodology of Unit II will consist of theoretical-practical demonstrations. After them, the students will have the opportunity to practise these skills and competences with a partner. Both students will perform both roles: physio and patient. The lecturers will supervise the students in pairs.

3 - New trends in dry needling.

The methodology of Unit III will be based on online theoretical-practical seminars in which new trends of dry needling will be shown.

Complementary, students will be guided during their group works, as these will be evaluated with a 30% of the total subject score. They will have to present a video about a topic previously agreed with the lecturer.

Volumen de trabajo del alumno:

Modalidad organizativa	Métodos de enseñanza	Horas estimadas
Actividades Presenciales	Clase magistral	15
	Otras actividades teóricas	3
	Casos prácticos	4
	Resolución de prácticas, problemas, ejercicios etc.	4
	Debates	1
	Talleres	19
	Actividades de evaluación	1
	New trends in dry needling seminars	6
Trabajo Autónomo	Asistencia a tutorías	9
	Estudio individual	50
	Preparación de trabajos en equipo	20
	Practical exam preparation	18
Horas totales:		150

SISTEMA DE EVALUACIÓN:

Obtención de la nota final:

Pruebas escritas:	35 %
Trabajos en equipo:	30 %
Prueba final:	35 %
TOTAL	100 %

*Las observaciones específicas sobre el sistema de evaluación serán comunicadas por escrito a los alumnos al inicio de la materia.

BIBLIOGRAFÍA Y DOCUMENTACIÓN:

Bibliografía básica:

Simons DG, Travell JG, Simons LS. Dolor y disfunción miofascial. El manual de los puntos gatillo. Extremidades inferiores. Madrid: Editorial Médica Panamericana; 2006.

Simons DG, Travell JG, Simons LS. Dolor y disfunción miofascial. El manual de los puntos gatillo. Mitad superior del cuerpo. Madrid: Editorial Médica Panamericana; 2006.

Valera Garrido F, Minaya Muñoz F. Fisioterapia invasiva. Barcelona: Editorial Elsevier España, S.L. 2016. 2ª edición. ISBN: 9788491130994

Valera Garrido F, Minaya Muñoz F. Advanced Techniques in Musculoskeletal Medicine & Physiotherapy. Editorial Elsevier. ISBN 10: 070206534X ISBN 13: 9780702065347.

Mayoral del Moral O, Salvat Salvat I. Fisioterapia Invasiva del Síndrome de Dolor Miofascial. Editorial Médica Panamericana. ISBN-10: 8498351030; ISBN-13: 978-8498351033

Bibliografía recomendada:

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Páginas web recomendadas:

Seminarios Travell y Simons	www.travellysimons.com
Técnica DNHS	www.dnhs.es
Trigger Points Maps	www.triggerpoints.net
NOIGROUP	http://www.noigroup.com/
Sociedad Científica Fisioterapia Invasiva Neumusculosquelética	http://www.socifin.org/

* Guía Docente sujeta a modificaciones