

Estudio Propio: **MÁSTER INTERNACIONAL EN TRICOLOGÍA Y TRASPLANTE CAPILAR**

Código Plan de Estudios: **EÑ59**

Año Académico: **2020-2021**

ESTRUCTURA GENERAL DEL PLAN DE ESTUDIOS:

CURSO	Obligatorios		Optativos		Prácticas Externas	Memoria/ Proyecto	Créditos
	Créditos	Nº Asignaturas	Créditos	Nº Asignaturas	Créditos	Créditos	
1º	50	14				10	60
2º							
3º							
ECTS TOTALES	50	14				10	60

PROGRAMA TEMÁTICO:

ASIGNATURAS OBLIGATORIAS

Código Asignatura	Curso	Denominación	Carácter OB/OP	Créditos
702804	1	INTRODUCCIÓN, ANATOMÍA Y FISIOLÓGIA DEL FOLÍCULO PILOSEBÁCEO. EXPLORACIÓN Y PRUEBAS DIAGNÓSTICAS	OB	3
702805	1	DERMATOPATOLOGÍA EN TRICOLOGÍA. PATOLOGÍAS DEL CUERO CABELLUDO	OB	3
702806	1	CLASIFICACIÓN DE LAS ALOPECIAS. DISPLASIAS PILOSAS. ALOPECIAS CONGÉNITAS. EFLUVIOS	OB	3
702807	1	ALOPECIA ANDROGENÉTICA	OB	3
702808	1	ALOPECIA AREATA. ALOPECIA POR FACTORES EXTERNOS, ENFERMEDADES SISTÉMICAS Y EN SITUACIONES ESPECIALES	OB	4
702809	1	ALOPECIAS CICATRICIALES. ALOPECIAS CICATRICIALES PRIMARIAS LINFOCÍTICAS	OB	4
702810	1	A. CICATRICIALES 1ªS NEUTROFÍLICAS, MIXTAS. A. CICATRICIALES 2ªS. INVESTIGACIÓN, NUEVOS TRATAMIENTOS	OB	4
702811	1	HIPERTRICOSIS E HIRSUTISMO. COSMÉTICA CAPILAR	OB	3
702812	1	TRASPLANTE CAPILAR: INTRODUCCIÓN, INDICACIONES Y ASPECTOS TÉCNICOS	OB	3
702813	1	TRASPLANTE CAPILAR: TÉCNICA FUT Y TÉCNICA FUE	OB	4
702814	1	DISPOSITIVOS PARA TRASPLANTE. ÁREAS ESPECIALES. EQUIPO AUXILIAR. CREAR UNA UNIDAD DE TRICOLOGÍA	OB	6
702815	1	UNIDAD DE TRICOLOGÍA, ORGANIZACIÓN Y TÉCNICAS DE EXPLORACIÓN. CLASES MAGISTRALES RESUMEN	OB	3
702816	1	UNIDAD DE TRASPLANTE CAPILAR. VISUALIZACIÓN DE REALIZACIÓN DE UN TRASPLANTE CAPILAR	OB	3
702817	1	REALIZACIÓN DE TRASPLANTE CAPILAR TIPO FUT Y TIPO FUE SUPERVISADO	OB	4

MEMORIA /PROYECTO/TRABAJO FIN DE MÁSTER

Código Asignatura	Curso	Denominación	Carácter OB/OP	Créditos
705777	1	TRABAJO FIN DE MÁSTER	OB	10

Carácter: OB - Obligatoria; OP – Optativa

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	INTRODUCCIÓN, ANATOMÍA Y FISIOLOGÍA DEL FOLÍCULO PILOSEBÁCEO. EXPLORACIÓN Y PRUEBAS DIAGNÓSTICAS	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	X	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

- Anatomía y fisiología del folículo.
- Organización de la consulta. Fotografía en tricología.
- Historia clínica y exploración en Tricología.
- Análisis. Tricograma.
- Ecografía y confocal.
- Tricología en medicina Forense.
- Tricoscopia:
 - Técnica e instrumentos.
 - Protocolización para la toma de fotografías clínicas y tricoscópicas.
 - Tricoscopia.
 - Tricoscopia en alopecia androgénica masculina y femenina.
 - Trichoscopy of alopecia areata, trichotillomania and other forms of non-scarring hair loss.
 - Trichoscopy of lichen planopilaris and frontal fibrosing alopecia
 - Trichoscopy in discoid Lupus Erythematosus, dissecting cellulitis and folliculitis decalvans.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Fotografía en tricología. Salvio Serrano y Francisco Mendoza Güil. Piel 2004; 19 (4): 177-8
- Buendía Eisman A y Arias Santiago S. El pelo en medicina forense.
- Camacho,FM, Tosti A. Editors. Montagna Tricologia. 3ª edición. Aula médica, Madrid 2013.
- Reddy K, Lowenstein EJ. Forensics in dermatology: Part I. J Am Acad Dermatol 2011; 64: 801-8
- Reddy K, Lowenstein EJ. Forensics in dermatology: Part II J Am Acad Dermatol 2011;64:811-24.
- Villanueva Cañadas E. Indicios en Medicina Legal: manchas, pelos y otros indicios.

- En: Gisbert Calabuig y Villanueva Cañadas.eds. Medicina Legal y Toxicología. Barcelona: Ed Masson. 2010:1275-1279
- M. Miteva M, Tosti A. 'A detective look' at hair biopsies from African-American patients . British J Dermatol 2012; 166:1289–1294
- B. Mohamed El-Zawahry, M. El Hanafy, D. Ahmed Bassiouny, M. Mohamed Fawzy, M. Abdel-Mageed Badawy, E. Mohamed El-Khateeb. In Vivo Visualization of Hair Follicles by Ultrasound Biomicroscopy in Alopecia Areata and Its Correlation with Histopathology. Acta Dermatovenerol Croat. 2015;23(1):12-18
- Alfageme F, Cerezo E. Ecografía en Patología Folicular. Actual. Med. 2014; 99: (793). Supl. 42-68
- Wortsman X, Guerrero R, Wortsman J. Hair Morphology in Androgenetic Alopecia. Sonographic and Electron Microscopic Studies. J UltrasoundMed 2014; 33:1265–1272
- R. Paus, I. Burgoa, C.I. Platt, T. Griffiths, E. Poblet and A. Izeta. Biology of the eyelash hair follicle: an enigma in plain sight. British Journal of Dermatology (2016) 174, pp741–752
- S. Purba T., S. Haslam I., Poblet E., Jiménez, F., Gandarillas, A., Izeta5, A. and Paus, R. Human epithelial hair follicle stem cells and their progeny: Current state of knowledge, the widening gap in translational research and future challenges. Bioessays 36: 513–525, 2014 WILEY Periodicals, Inc.

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	DERMATOPATOLOGÍA EN TRICOLOGÍA. PATOLOGÍAS DEL CUERO CABELLUDO	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	X	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español/Inglés	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

Dermatopatología del folículo pilo-sebáceo.

- Histopatología del folículo piloso y otros anejos cutáneos.
- Histopatología de las alopecias no cicatriciales.
- Histopathology of cicatricial alopecias.
- Challenges in the histopathological evaluation of alopecia.
- Clinicopathologic lessons in distinguishing cicatricial alopecia.
- Puntos clave en el diagnóstico histopatológico de las alopecias cicatriciales.

Patologías del cuero cabelludo: dermatitis seborreica, infecciones. Tratamiento.

- Psoriasis del cuero cabelludo y dermatitis seborreica.
- Tiñas del cuero cabelludo.
- Otras infecciones del cuero cabelludo.
- Eczemas de contacto.
- Tumores primarios del cuero cabelludo.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- LaSenna C, Miteva M. Special Stains and Immunohistochemical Stains in Hair Pathology. Am J Dermatopathol. 2016 May;38(5):327-37. doi: 10.1097/DAD.0000000000000418. Review. PubMed PMID: 27097238
- Miteva M, Tosti A. Central Centrifugal Cicatricial Alopecia Presenting with Irregular Patchy Alopecia on the Lateral and Posterior Scalp. Skin Appendage Disord. 2015 Mar;1(1):1-5. doi: 10.1159/000370315. PubMed PMID: 27172374; PubMed Central PMCID: PMC4857853.

- Baquerizo Nole KL, Nusbaum B, Pinto GM, Miteva M. Lichen Planopilaris in the Androgenetic Alopecia Area: A Pitfall for Hair Transplantation. *Skin Appendage Disord.* 2015 Mar;1(1):49-53. doi: 10.1159/000381588. PubMed PMID: 27171849; PubMed Central PMCID: PMC4857822
- Miteva M, Tosti A. Pathologic diagnosis of central centrifugal cicatricial alopecia on horizontal sections. *Am J Dermatopathol.* 2014 Nov;36(11):859-64; quiz 865-7. doi: 10.1097/DAD.000000000000174. PubMed PMID: 25222198.
- Miteva M, Tosti A. Dermoscopy guided scalp biopsy in cicatricial alopecia. *J Eur Acad Dermatol Venereol.* 2013 Oct;27(10):1299-303. doi: 10.1111/j.1468-3083.2012.04530.x. PubMed PMID: 22449222.
- Miteva M. A comprehensive approach to hair pathology of horizontal sections. *Am J Dermatopathol.* 2013 Jul;35(5):529-40. doi: 10.1097/DAD.0b013e31826be7ba. PubMed PMID: 23782638.
- Tosti A, Palamaras I, Miteva M, Misciali C. Docetaxel and permanent alopecia. *J Am Acad Dermatol.* 2013 May;68(5):e151. doi: 10.1016/j.jaad.2010.06.064. PubMed PMID: 23602186.
- Miteva M, Torres F, Tosti A. The 'eyes' or 'goggles' as a clue to the histopathological diagnosis of primary lymphocytic cicatricial alopecia. *Br J Dermatol.* 2012 Feb;166(2):454-5. doi: 10.1111/j.1365-2133.2011.10578.x. PubMed PMID: 21848687.
- Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia: Other lymphocytic primary cicatricial alopecias and neutrophilic and mixed primary cicatricial alopecias. *J Am Acad Dermatol.* 2016 Dec;75(6):1101-1117. doi: 10.1016/j.jaad.2015.01.056. Review. PubMed PMID: 27846945.
- Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia: Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. *J Am Acad Dermatol.* 2016 Dec;75(6):1081-1099. doi: 10.1016/j.jaad.2014.09.058. Review. PubMed PMID: 27846944.
- Kolivras A, Thompson C. Primary scalp alopecia: new histopathological tools, new concepts and a practical guide to diagnosis. *J Cutan Pathol.* 2017 Jan;44(1):53-69. doi: 10.1111/cup.12822. Review. PubMed PMID: 27682637
- Chung HJ, Goldberg LJ. Histologic features of chronic cutaneous lupus erythematosus of the scalp using horizontal sectioning: Emphasis on follicular findings. *J Am Acad Dermatol.* 2017 Aug;77(2):349-355. doi:10.1016/j.jaad.2017.02.039. Epub 2017 Jun 16. PubMed PMID: 28624120.
- Wong D, Goldberg LJ. The depth of inflammation in frontal fibrosing alopecia and lichen planopilaris: A potential distinguishing feature. *J Am Acad Dermatol.* 2017 Jun;76(6):1183-1184
- Doytcheva K, Tan T, Guitart J, Gerami P, Yazdan P. Naked Hair Shafts as a Marker of Cicatricial Alopecia. *Am J Dermatopathol.* 2017 Dec 28.
- Sellheyer K, Bergfeld WF. Histopathologic evaluation of alopecias. *Am J Dermatopathol.* 2006;28:236-59.
- Weedon D. En: Weedon D, editor. *Diseases of cutaneous appendages. Weedon's skin pathology.* Philadelphia: Elsevier; 2010. p.417-31.
- Bergfeld WF. Alopecia: Histologic changes. *Adv Dermatol.* 1989;4:301-22.
- Bergfeld WF. Hair disorders. En: Moschella SL, Hurley HJ, editores. *Dermatology.* 3rd ed. Philadelphia: WB Saunders; 1992. p. 1541-60.
- Ioannides G. Alopecia: A pathologist's view. *Int J Dermatol.* 1982;21:316-28.
- Mulinari-Brenner F, Bergfeld WF. Hair loss: An overview. *Dermatol Nurs.* 2001;13:277-8.
- Paus R, Cotsarelis G. The biology of hair follicles. *N Engl J Med.* 1999;341:491-7.
- Pinkus H. Alopecia. Clinicopathologic correlations. *Int J Dermatol.* 1980;19:245-53.
- Sperling LC. Hair and systemic disease. *Dermatol Clin.* 2001;19:711-26.
- Stengel F, Ackerman AB. Diagnosing common alopecias. *Am Fam Physician.* 1978;18:76-82.
- Stenn K, Fleckman P. Hair and nail physiology. En: Hordinsky MK, Sawaya ME, Scher RK, editores. *Atlas of hair and nails.* Philadelphia: Churchill Livingstone; 2000. p. 3-8.
- Whiting DA, Templeton SF, Solomon AR. Disorders of cutaneous appendages. En: Barnhill RL, editor. *Textbook of dermatopathology.* New York: McGraw-Hill; 1998. p. 201-31.
- Weedon D, Strutton G. The recognition of early stages of catagen. *Am J Dermatopathol.* 1984;6:553-5.
- Ohyama M, Terunuma A, Tock CL, Radonovich MF, Pise-Masison CA, Hopping SB, et al.

Characterization and isolation of stem cell enriched human hair follicle bulge cells. *J Clin Invest.* 2006;116:249-60.

- Sellheyer K, Nelson P. Follicular stem cell marker PHLDA1 (TDAG51) is superior to cytokeratin-20 in differentiating between trichoepithelioma and basal cell carcinoma in small biopsy specimens. *J Cutan Pathol.* 2011;38:542-5.
- Cotsarelis G, Sun TT, Lavker RM. Label-retaining cells reside in the bulge area of pilosebaceous unit: Implications for follicular stem cells, hair cycle, and skin carcinogenesis. *Cell.* 1990;61:1329-37.
- Sun TT, Cotsarelis G, Lavker RM. Hair follicular stem cells. The bulge activation hypothesis. *J Invest Dermatol.* 1991;96:779-89.
- Eudy G, Solomon AR. The histopathology of noncicatricial alopecia. *Semin Cutan Med Surg.* 2006;25:35-40.
- Itami S, Kurata S, Sonoda T, Takayasu S. Mechanism of action of androgen in dermal papilla cells. *Ann N Y Acad Sci.* 1991;642:385-95.
- Sawaya ME, Price VH. Different levels of 5alpha-reductase type I and II, aromatase and androgen receptor in hair follicles of women and men with androgenetic alopecia. *J Invest Dermatol.* 1997;109:296-300.
- Chartier MB, Hoss DM, Grant-Kels JM. Approach to the adult female patient with diffuse nonscarring alopecia. *J Am Acad Dermatol.* 2002;47:809-18.
- Bergfeld WF, Redmond GP. Androgenic alopecia. *Dermatol Clin.* 1987;5:491-500.
- Tosti A, Piraccini BM. Androgenetic alopecia. *Int J Dermatol.* 1999;38 Suppl 1:1-7.
- Lattanand A, Johnson WC. Male pattern alopecia. A histopathologic and histochemical study. *J Cutan Pathol.* 1975;2:58-70.
- Whiting DA. Diagnostic and predictive value of horizontal sections of scalp biopsy specimens in male androgenetic alopecia. *J Am Acad Dermatol.* 1993;28:755-63.
- Whiting DA. Scalp biopsy as a diagnostic and prognostic tool in androgenetic alopecia. *Dermatol Ther.* 1998;8:24-33.
- Whiting DA. Possible mechanisms of miniaturization during androgenetic alopecia or pattern hair loss. *J Am Acad Dermatol.* 2001;45 Suppl 3:81-6.
- Whiting DA, Waldstreicher J, Sanchez M, Kaufman KD. Measuring reversal of hair miniaturization in androgenetic alopecia by follicular counts in horizontal sections on serial scalp biopsies: Results of finasteride 1 mg treatment of men and postmenopausal women. *J Invest Dermatol Symp Proc.* 1999;4: 282-4.
- Templeton SF, Santa Cruz DJ, Solomon AR. Alopecia: Histologic diagnosis by transverse sections. *Semin Diagn Pathol.* 1996;13:2-18.
- Abell E. Pathology of male pattern alopecia. *Arch Dermatol.* 1984;120:1607-8.
- Abell E. Histologic response to topically applied minoxidil in male-pattern alopecia. *Clin Dermatol.* 1988;6:191-4.
- Rook A, Dawber R. *Diseases of the hair and scalp.* Oxford: Blackwell Scientific Publications; 1982.
- Kligman AM. The comparative histopathology of male pattern baldness and senescent baldness. *Clin Dermatol.* 1988;6:108-18.
- Ackerman AB, Guo Y, Vitale P. Clue 1. En: *Clues to diagnosis in dermatopathology ii.* Chicago, IL, USA: ASCP Press; 1992. p. 1-4.
- Schreck-Purola I, Lindroos B, Nyström REA, Stelälä K. Hair neogenesis in man: A histoquantitative study based on 1,000 scalp biopsies. En: Orfanos CE, Montagna W, Stüttgen G, editores. *Hair research. Status and future aspects.* Berlin: Springer; 1981. p. 344-52.
- Whiting DA. The value of horizontal sections of scalp biopsies. *J Cutan Aging Cosmet Dermatol.* 1990;1:165-73.
- Young JW, Conte ET, Leavitt ML, Nafz MA, Schroeter AL. Cutaneous immunopathology of androgenetic alopecia. *J Am Osteopath Assoc.* 1991;91:765-71.
- Jaworsky C, Kligman AM, Murphy GF. Characterization of inflammatory infiltrates in male pattern alopecia: Implications for pathogenesis. *Br J Dermatol.* 1992;127:239-46.
- Pinkus H. Differential patterns of elastic fibers in scarring and non-scarring alopecias. *J Cutan Pathol.* 1978;5: 93-104.

- Arao T, Perkins EM. The interrelation of elastic tissue and human hair follicles. En: Montagna W, Dobson RL, editores. Hair growth. Oxford: Pergamon Press; 1969. p. 433-41.
- Steck WD. Telogen effluvium. A clinically useful concept, with traction alopecia as an example. *Cutis*. 1978;21: 543-8.
- Sinclair R. Diffuse hair loss. *Int J Dermatol*. 1999;38 Suppl 1:8-18.
- Harrison S, Sinclair R. Telogen effluvium. *Clin Exp Dermatol*. 2002;27:389-95.
- Solomon AR. The transversely sectioned scalp biopsy specimen: the technique and an algorithm for its use in the diagnosis of alopecia. *Adv Dermatol*. 1994;9:127-57.
- Headington JT. Telogen effluvium. New concepts and review. *Arch Dermatol*. 1993;129:356-63.
- Sperling LC. Transverse anatomy of telogen effluvium. *J Am Acad Dermatol*. 1990;16:3.
- Rashid RM. Analysis of clinical and histologic correlations in alopecia areata and telogen effluvium: Adversities in alopecia pattern mimicry. *Cutis*. 2013;91:141-4.
- Sperling LC, Lupton GP. Histopathology of non-scarring alopecia. *J Cutan Pathol*. 1995;22:97-114.
- Werner B, Mulinari-Brenner F. Clinical and histological challenge in the differential diagnosis of diffuse alopecia: Female androgenetic alopecia, telogen effluvium and alopecia areata-part II. *An Bras Dermatol*. 2012;87:884-90.
- Whiting DA. Chronic telogen effluvium: Increased scalp hair shedding in middle-aged women. *J Am Acad Dermatol*. 1996;35:899-906.
- Gilmore S, Sinclair R. Chronic telogen effluvium is due to a reduction in the variance of anagen duration. *Australas J Dermatol*. 2010;51:163-7.
- Whiting DA. Update on chronic telogen effluvium. *Exp Dermatol*. 1999;8:305-6.
- Sinclair R. Chronic telogen effluvium: A study of 5 patients over 7 years. *J Am Acad Dermatol*. 2005;52:12-6.
- Madani S, Shapiro J. Alopecia areata update. *J Am Acad Dermatol*. 2000;42:549-66.
- Alkhalifah A. Alopecia areata update. *Dermatol Clin*. 2013;31:93-108.
- Hordinsky MK. Alopecia areata. En: Olsen EA, editor. Disorders of hair growth: Diagnosis and treatment. New York: McGraw- Hill; 1994. p. 195-222.
- Majewski B, Koh MS, Taylor DR, Watson B, Rhodes EL. Increased ratio of helper to suppressor T cells in alopecia areata. *Br J Dermatol*. 1984;110:171-5.
- Ranki A, Kianto U, Kanerva L, Tolvanen E, Johansson E. Immunohistochemical and electron microscopic characterization of the cellular infiltrate in alopecia (areata, totalis, and universalis). *J Invest Dermatol*. 1984;83:7-11.
- Todes-Taylor N, Turner R, Wood GS, Stratte PT, Morhenn VB. T cell subpopulations in alopecia. *J Am Acad Dermatol*. 1984;11:216-23.
- Happle R, Klein HM, Macher E. Topical immunotherapy changes the composition of the peribulbar infiltrate in alopecia areata. *Arch Dermatol Res*. 1986;278:214-8.
- Messenger AG, Slater DN, Bleehan SS. Alopecia areata: Alterations in the hair growth cycle and correlation with the follicular pathology. *Br J Dermatol*. 1986;114:337-47.
- Thein C, Strange P, Hansen ER, Baadsgaard O. Lesional alopecia areata T lymphocytes downregulate epithelial cell proliferation. *Arch Dermatol Res*. 1997;289:384-8.
- Peckham SJ, Sloan SB, Elston DM. Histologic features of alopecia areata other than peribulbar lymphocytic infiltrates. *J Am Acad Dermatol*. 2011;65:615-20.
- Ackerman AB, Guo Y, Vitale P. Clue 83. En: Ackerman B, Guo Y, Vitale P, editores. Clues to diagnosis in dermatopathology II. Chicago: ASCP Press; 1992. p. 329-32.
- Mehregan AH, Mehregan DA. Syringoma-like sweat duct proliferation in scalp alopecias. *J Cutan Pathol*. 1990;17:355-7.
- Pierard GE, de La Brassinne M. Cellular activity in the dermis surrounding the hair bulb in alopecia areata. *J Cutan Pathol*. 1975;2:240-5.
- Ackerman AB. Alopecia areata. En: Histologic diagnosis of inflammatory skin diseases. Philadelphia: Lea and Febiger; 1978. p. 696-701.
- Nam-Cha SH, Ghul G, Fernandez-Peña P, Fraga J. Alopecia syphilitica with detection of treponema pallidum in the hair follicle. *J Cutan Pathol*. 2007;134 Suppl:37-40.
- Jordaan HF, Louw M. The moth-eaten alopecia of secondary syphilis. A histopathological study of 12

- patients. *Am J Dermatopathol.* 1995;17:158-62.
- Lee JY, Hsu ML. Alopecia syphilitica, a simulator of alopecia areata: Histopathology and differential diagnosis. *J Cutan Pathol.* 1991;18:87-92.
 - Huynh M, Gavino AC, Magid M. Trichotillomania *Semin Cutan Med Surg.* 2013;32:88-94.
 - Hautmann G, Hercogova J, Lotti T. Trichotillomania. *J Am Acad Dermatol.* 2002;46:807-21.
 - Stefanato CM. Histopathology of alopecia: A clinicopathological approach to diagnosis. *Histopathology.* 2010;56: 24-38.
 - Muller SA, Winkelmann RK. Trichotillomania. A clinicopathologic study of 24 cases. *Arch Dermatol.* 1972;105:535-40.
 - Muller SA. Trichotillomania: A histopathologic study in sixty-six patients. *J Am Acad Dermatol.* 1990;23:56-62.
 - Lachapelle JM, Pierard GE. Traumatic alopecia in trichotillomania: A pathogenic interpretation of histologic lesions in the pilosebaceous unit. *J Cutan Pathol.* 1977;4:51-67.
 - Bergfeld W, Mulinari-Brenner F, McCarron K, Embi C. The combined utilization of clinical and histological findings in the diagnosis of trichotillomania. *J Cutan Pathol.* 2002;29: 207-14.
 - Royer MC, Sperling LC. Splitting hairs: The 'hamburger sign' in trichotillomania. *J Cutan Pathol.* 2006;33 Suppl 2:63-4.
 - DeVillez RL. Infectious, physical, and inflammatory causes of hair and scalp abnormalities. En: Olsen EA, editor. *Disorders of hair growth: Diagnosis and treatment.* New York: McGraw-Hill; 1994. p. 71-90.
 - Wilborn WS. Disorders of hair growth in African Americans. En: Olsen EA, editor. *Disorders of hair growth: Diagnosis and treatment.* New York: McGraw-Hill; 1994. p. 389-407.
 - Ackerman AB, Walton NW III, Jones RE, Charissi C. Hot comb alopecia/follicular degeneration syndrome in African-American women is traction alopecia. *Dermatopathol Pract Concept.* 2000;6:320-36.
 - Kolivras A, Thompson C. Primary scalp alopecia: new histopathological tools, new concepts and a practical guide to diagnosis. *J Cutan Pathol.* 2016 Sep 28. doi: 10.1111/cup.12822. [Epub ahead of print].
 - Gilhar A, Schrum AG, Etzioni A, Waldmann H, Paus R. Alopecia areata: Animal models illuminate autoimmune pathogenesis and novel immunotherapeutic strategies. *Autoimmun Rev.* 2016 Jul;15(7):726-35.
 - Piraccini BM, Broccoli A, Starace M, Gaspari V, D'Antuono A, Dika E, Patrizi
 - Hair and Scalp Manifestations in Secondary Syphilis: Epidemiology, Clinical Features and Trichoscopy. *Dermatology.* 2015;231(2):171-6.
 - Vidal CI. Overview of Alopecia: A Dermatopathologist's Perspective. *Mo Med.* 2015 Jul-Aug;112(4):308-12.
 - Bernárdez C, Molina-Ruiz AM, Requena L. Histologic features of alopecias-part I: nonscarring alopecias. *Actas Dermosifiliogr.* 2015 Apr;106(3):158-67.
 - Sperling LC, Cowper SE, Knopp EA. *An Atlas of Hair Pathology with Clinical Correlations.* Second edition. New York & London: Informa Healthcare. 2012. 216 pp. ISBN 978-184184733-7
 - Headington JT. Transverse Microscopic Anatomy of the Human Scalp: A Basis for a Morphometric Approach to Disorders of the Hair Follicle. *Arch Dermatol.* 1984;120(4):449-456.
 - Elston CA, Kazlouskaya V, Elston DM. Elastic staining versus fluorescent and polarized microscopy in the diagnosis of alopecia. *J Am Acad Dermatol.* 2013 Aug;69(2):288-93.
 - Kazlouskaya V, Malhotra S, Lambe J, Idriss MH, Elston D, Andres C. The utility of elastic Verhoeff-Van Gieson staining in dermatopathology. *J Cutan Pathol.* 2013 Feb;40(2):211-25.
 - Walsh NM, Lai J, Hanly JG, Green PJ, Bosisio F, Garcias-Ladaria J, Cerroni L. Plasmacytoid dendritic cells in hypertrophic discoid lupus erythematosus: an objective evaluation of their diagnostic value. *J Cutan Pathol.* 2015 Jan;42(1):32-8.
 - Ko CJ, Srivastava B, Braverman I, Antaya RJ, McNiff JM. Hypertrophic lupus erythematosus: the diagnostic utility of CD123 staining. *J Cutan Pathol.* 2011 Nov;38(11):889-92.
 - Nguyen JV1, Hudacek K, Whitten JA, Rubin AI, Seykora JT. The HoVert technique: a novel method for the sectioning of alopecia biopsies. *J Cutan Pathol.* 2011 May;38(5):401-6.

- Nedoszytko B, Lewicka Potocka Z, Szczerkowska-Dobosza A et al. Monilethrix in monozygotic twins with very rare mutation in KRT 86 gene. *Eur Acad Venerol* 2017;31:e409-10.
- Penzi LR, Saavedra A, Maryanne M et al. Long-standing pili torti in 2 patients with chronic graft vs host disease. *R JAAD Case Rep* 2017;4:44-6.
- Yoganathan S, Sudhakar SV, Arunachal G et al. Menkes disease and response to copper histidine: An Indian case series. *Ann Indian Acad Neurol.* 2017;20:62-8.
- Mercer SW, Wang J, Burke R. In Vivo Modeling of the Pathogenic Effect of Copper Transporter Mutations That Cause Menkes and Wilson Diseases, Motor Neuropathy, and Susceptibility to Alzheimer's Disease. *J Biol Chem.* 2017;292:4113-22.
- Roda A, Mendoza-Sánchez M, Travassos AR et al. Infliximab therapy for Netherton syndrome: A case report. *JAAD Case Reports* 2017;3:5 50-2.
- De Niar M, Gigante J. Desquamating Rash in a patient with undiagnosed Netherton syndrome. *J Pediatr.* 2018;192:262-262.e1.
- Nevet MJ, Indelman M, Ben Ari J et al. A case of Netherton syndrome with intestinal atresia, a novel SPINK5 mutation, and fatal course. *Int J Dermatol* 2017; 56:1055-7.
- Brown S, De la Cerda A, Stephen MD. Netherton syndrome in association with Vitamin D deficiency. *Cutis* 2017;99:E8-E9.
- Paluel Marmont C, Bellon N, Barbet P et al. Eosinophilic esophagitis and colonic mucosal eosinophilia in Netherton syndrome. *J Allergy Clin Immunol* 2017;139:2003-5.
- Trichothiodystrophy causative TFIIIB mutation affects transcription in highly differentiated tissue. *Hum Mol Genet.* 2017;26:4689-98.
- Yang YW, Yarbrough K, Mitkov M et al. Polarized transilluminating dermoscopy: bedside trichoscopic diagnosis of trichothiodystrophy. *Pediatr Dermatol.* 2018; 35:147-9.
- Kane J, Berrebi K, McLean R et al. Noonan Syndrome with loose anagen hair associated with trichorrhexis nodosa and trichoptilosis. *Clin Case Rep* 2017;5:1152-4.
- Haskin A, Kwatra SG, Aguh C. Breaking the cycle of hair breakage: pearls for the management of acquired trichorrhexis nodosa. *J Dermatol Treat* 2017;28: 322-6.
- Albers LN, Maley AM, MacKelfresh JB. Blowing bubbles: Dermoscopy of bubble hair. *Int J Trichology* 2017;9:122-3.
- Nam CH, Park M, Choi MS et al. Pili annulati with multiple fragile hairs. *Ann Dermatol.* 2017;29:254-5.
- Teyssie S, Weiler L, Thomas L et al. Pili annulati. *Ann Dermatol Venerol* 2017;144:399-400.
- Fernandes KAP, Fernandes KAP, Vargas TJS et al. Woolly hair nevus. *An Bras Dermatol.* 2017;92(5 Suppl 1):163-5.
- Pavone P, Falsaperla R, Barbagallo M et al. Clinical spectrum of woolly hair: indications for cerebral involvement. *Ital J Pediatr.* 2017;43:99.
- Hsu CK, Romano MT, Nanda A et al. Congenital Anonychia and Uncombable Hair Syndrome: Coinheritance of Homozygous Mutations in RSP04 and PADI3. *J Invest Dermatol.* 2017;137:1176-9.
- Swamy SS, Ravikumar BC, Vinay KN et al. Uncombable hair syndrome with a woolly hair nevus. *Indian J Dermatol Venereol Leprol.* 2017; 83:87-8.
- Clobetasol propionate shampoo 0.05% is efficacious and safe for long-term control of scalp psoriasis. *Cutis.* 2010 Jan;85(1):43-50.
- Current management of scalp psoriasis. *Skin Therapy Lett.* 2015 May-Jun;20(3):5-7.
- Long-term management of scalp psoriasis: perspectives from the International Psoriasis Council. *J Dermatolog Treat.* 2013 Jun;24(3):188-92.
- Newer trends in the management of psoriasis at difficult to treat locations: Scalp, palmoplantar disease and nails. *Indian J Dermatol Venereol Leprol.* 2010 Nov-Dec;76(6):634-44.
- An update on scalp psoriasis. *Actas Dermosifiliogr.* 2009 Sep;100(7):536-43.
- Psoriasis of the scalp. Diagnosis and management. *Am J Clin Dermatol.* 2001;2(3):159-65.
- Scalp psoriasis: European consensus on grading and treatment algorithm. *J Eur Acad Dermatol Venerol.* 2009 Dec;23(12):1435-44.
- Scalp psoriasis. *J Dtsch Dermatol Ges.* 2011 Jan;9(1):70-4.
- Topical treatments for chronic plaque psoriasis of the scalp: a systematic review. *Br J Dermatol.* 2013 Sep;169(3):519-27.

- Topical treatments for scalp psoriasis: summary of a Cochrane Systematic Review. *Br J Dermatol.* 2016 Jun 17.
- Demystifying pediculosis: school nurses taking the lead. *Pediatr Nurs.* 2014 Sep-Oct;40(5):226-35.
- Head Lice. *Epidemiology, Biology, Diagnosis and Treatment.* *Dtsch Arztebl Int.* 2016 Nov 11;113(45):763-772.
- Head lice. *Pediatrics.* 2015 May;135(5):e1355-65.
- How long do louse eggs take to hatch? A possible answer to an age-old riddle. *Med Vet Entomol.* 2014 Jun;28(2):119-24.
- Lice update: new solutions to an old problem. *Clin Dermatol.* 2015 May-Jun;33(3):347-54.
- Lice. *Semin Cutan Med Surg.* 2014 Sep;33(3):116-8.
- Management and Treatment of Human Lice. *Biomed Res Int.* 2016;2016:8962685
- Management of Head Louse Infestations in the United States-A Literature Review. *Pediatr Dermatol.* 2016 Sep;33(5):466-72.
- Pediculosis capitis: an update. *Indian J Dermatol Venereol Leprol.* 2012 Jul-Aug;78(4):429-38.
- Clinical Practice Update: Pediculosis Capitis. *Pediatr Nurs.* 2015 Sep-Oct;41(5):227-34.
- Treatment of Pediculosis Capitis. *Indian J Dermatol.* 2015 May-Jun;60(3):238-47.
- Treatment of pediculosis capitis: a critical appraisal of the current literature. *Am J Clin Dermatol.* 2014 Oct;15(5):401-12.
- Head lice infestations: A clinical update. *Paediatr Child Health.* 2018 Feb;23(1):e18-e24

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	CLASIFICACIÓN DE LAS ALOPECIAS. DISPLASIAS PILOSAS. ALOPECIAS CONGÉNITAS. EFLUVIOS	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	x	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

Clasificación alopecias. Displasias pilosas y alopecias congénitas.

- Clasificación de las Alopecias.
- Atriquias e hipotricosis. Displasias ectodérmicas.
- Alopecias congénitas no sindrómicas.
- Displasias pilosas.

Efluvio telógeno y efluvio anágeno.

- Introducción: Fisiología del cabello aplicada al ciclo capilar.
- Efluvio anagénico.
- Efluvio Telogénico.
- Alopecia por fármacos.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Lidia Rudnicka, Adriana Rakowska, Marta Kurzeja, Małgorzata Olszewska. Hair Shafts in Trichoscopy
- Clues for Diagnosis of Hair and Scalp Diseases. Dermatol Clin 31 (2013) 695–708
- J. Ferrando & R. Grimalt. PEDIATRIC HAIR DISORDERS. CRC Pres, Taylor & Francis Group. Boca Raton, London, NY. 2017
- Nedoszytko B, Lewicka Potocka Z, Szczerkowska-Dobosz A et al. Monilethrix in monozygotic twins with very rare mutation in KRT 86 gene. Eur Acad Venerol 2017;31:e409-10.
- Penzi LR, Saavedra A, Maryanne M et al. Long-standing pili torti in 2 patients with chronic graft vs host disease. R JAAD Case Rep 2017;4:44-6.
- Yoganathan S, Sudhakar SV, Arunachal G et al. Menkes disease and response to copper histidine: An Indian case series. Ann Indian Acad Neurol. 2017;20:62-8.

- Mercer SW, Wang J, Burke R. In Vivo Modeling of the Pathogenic Effect of Copper Transporter Mutations That Cause Menkes and Wilson Diseases, Motor Neuropathy, and Susceptibility to Alzheimer's Disease. *J Biol Chem.* 2017;292:4113-22.
- Roda A, Mendoza-Sánchez M, Travassos AR et al. Infliximab therapy for Netherton syndrome: A case report. *JAAD Case Reports* 2017;3:5 50-2.
- De Niar M, Gigante J. Desquamating Rash in a patient with undiagnosed Netherton syndrome. *J Pediatr.* 2018;192:262-262.e1.
- Nevet MJ, Indelman M, Ben Ari J et al. A case of Netherton syndrome with intestinal atresia, a novel SPINK5 mutation, and fatal course. *Int J Dermatol* 2017; 56:1055-7.
- Brown S, De la Cerda A, Stephen MD. Netherton syndrome in association with Vitamin D deficiency. *Cutis* 2017;99:E8-E9.
- Paluel Marmont C, Bellon N, Barbet P et al. Eosinophilic esophagitis and colonic mucosal eosinophilia in Netherton syndrome. *J Allergy Clin Immunol* 2017;139:2003-5.
- Trichothiodystrophy causative TFIIEB mutation affects transcription in highly differentiated tissue. *Hum Mol Genet.* 2017;26:4689-98.
- Yang YW, Yarbrough K, Mitkov M et al. Polarized transilluminating dermoscopy: bedside trichoscopic diagnosis of trichothiodystrophy. *Pediatr Dermatol.* 2018; 35:147-9.
- Kane J, Berrebi K, McLean R et al. Noonan Syndrome with loose anagen hair associated with trichorrhexis nodosa and trichoptilosis. *Clin Case Rep* 2017;5:1152-4.
- Haskin A, Kwatra SG, Aguh C. Breaking the cycle of hair breakage: pearls for the management of acquired trichorrhexis nodosa. *J Dermatol Treat* 2017;28: 322-6.
- Albers LN, Maley AM, MacKelfresh JB. Blowing bubbles: Dermoscopy of bubble hair
- *Int J Trichology* 2017;9:122-3.
- Nam CH, Park M, Choi MS et al. Pili annulati with multiple fragile hairs. *Ann Dermatol.* 2017;29:254-6.
- Teyseire S, Weiler L, Thomas L et al. Pili annulati. *Ann Dermatol Venerol* 2017;144:399-400.
- Fernandes KAP, Fernandes KAP, Vargas TJS et al. Woolly hair nevus. *An Bras Dermatol.* 2017;92(5 Suppl 1):163-5.
- Pavone P, Falsaperla R, Barbagallo M et al. Clinical spectrum of woolly hair: indications for cerebral involvement. *Ital J Pediatr.* 2017;43:99.
- Hsu CK, Romano MT, Nanda A et al. Congenital Anonychia and Uncombable Hair Syndrome: Coinheritance of Homozygous Mutations in RSPO4 and PADI3. *J Invest Dermatol.* 2017;137:1176-9.
- Swamy SS, Ravikumar BC, Vinay KN et al. Uncombable hair syndrome with a woolly hair nevus. *Indian J Dermatol Venereol Leprol.* 2017; 83:87-8.
- Milner Y et al. Exogen, shedding phase of the hair growth cycle; characterization of a mouse model. *J Invest Dermatol* 2002;119:639-44.
- Eshini Perera, Rodney Sinclair Treatment of chronic telogen effluvium with oral minoxidil: A retrospective study
- Rebora A. Telogen effluvium: an etiopathogenetic theory. *Int J Dermatol* 1993;32:339-40.
- Jiang Q, et al. UV radiation down-regulates Dsg-2 via Rac/NADPH oxidase-mediated generation of ROS in human lens epithelial cells. *Int J Mol Med* 2006;18:381-387
- Rushton DH, Bergfeld WF, Gilkes JJ, Van Neste D. Iron deficiency and hair loss-nothing new? *J Am Acad Dermatol.* 2011;65:203-4
- Sinclair R. There is no clear association between low serum ferritin and chronic diffuse telogen hair loss. *Br J Dermatol.* 2002;147:982-984.
- Olsen EA, et al. Iron deficiency in female pattern hair loss, chronic telogen effluvium, and control groups. *J Am Acad Dermatol.* 2010;63:991-999.
- Malanin K, Telegdy E, Qaxaq H. Hair loss and serum zinc values. *Eur J Dermatol* 2007;17:446-447.
- Paus R. *J Invest Dermatol Symp Proc.* 2007;12(2):20-2.
- Baldari M, Guarrera M, Rebora A. Trichodynia is a distinguishing symptom of telogen effluvium. *J Eur Acad Dermatol Venereol.* 2009 ;23:6
- Grimalt R, Ferrando J, Grimalt F. Trichodynia *Dermatology* 1998;196:374.
- Perez-Mora N, Goren A, Velasco C, Bermudez F. Acute telogen effluvium onset event is associated

with the presence of female androgenetic alopecia: potential therapeutic implications. *Dermatol Ther.* 2014;27:159-62.

- Reborá A, Guarrera M, Drago F. Postpartum telogen effluvium. *J Eur Acad Dermatol Venereol.* 2015 Jan 20.
- Guarrera M, Fiorucci MC, Reborá A. Methods of hair loss evaluation: a comparison of TrichoScan® with the modified wash test. *Exp Dermatol.* 2013;22:482
- Sinclair R. Chronic telogen effluvium: a study of 5 patients over 7 years. *J Am Acad Dermatol.* 2005;5:12-6.
- Shrivastava SB. Diffuse hair loss in females: diagnosis and management. *Indian J Dermatol Venereol Leprol.* 2009;75:20-7.
- Ingrid Herskovitz and Antonella Tosti. Female Pattern Hair Loss. *Int J Endocrinol Metab.* 2013
- Serrano-Falcón C, Fernández-Puignaire MA, Serrano-Ortega S. Evaluación del pelo y cuero cabelludo: tricograma. *Actas Dermosifiliogr.* 2013;104(10):867---876
- Kligman AM: Pathologic dynamics of human hair loss. I. Telogen Effluvium *Arch Dermatol* 1961;83:175-198
- Reborá A: Telogen Effluvium revisited. *G Ital Dermatol Venereol* 2014;149:47-54.
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management.* *Curr Prob Dermatol Basel, Karger* 2015;47: 97-106.
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management.* *Curr Prob Dermatol Basel, Karger* 2015;47:97-106
- Reborá A. Intermittent Chronic Telogen Effluvium. *Skin Appendage. Disord.* 2017;3(1):36-38.
- Bernard BA. Advances in Understanding Hair Growth. *F1000Res.* 2016 Feb 8;5. pii: F1000 Faculty Rev-147. doi: 10.12688/f1000research.7520.1. eCollection 2016.
- Sohn KM, et al. Hair growth-promotion effects of different alternating current parameter settings are mediated by the activation of Wnt/ β -catenin and MAPK pathway. *Exp Dermatol.* 2015 Aug 13. doi: 10.1111/exd.12827.
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management.* *Curr Prob Dermatol Basel, Karger* 2015;47:97-106.
- Gerkowicz A, et al. The Role of Vitamin D in Non-Scarring Alopecia. *Int J Mol Sci.* 2017;18(12). pii: E2653. doi: 10.3390/ijms18122653.
- Cheung EJ, Sink JR, English Iii JC. Vitamin and Mineral Deficiencies in Patients with Telogen Effluvium: A Retrospective Cross-Sectional Study. *J Drugs Dermatol.* 2016;15(10):1235-1237.
- Fischer TW. The influence of melatonin on hair physiology. *Hautarzt.* 2009;60:962-72.
- Tamura H et al. Melatonin and the ovary: physiological and pathophysiological implications. *Fertil Steril.* 2009;92:328-43.
- Fischer TW, et al. Topical melatonin for treatment of androgenetic alopecia. *Int J Trichology.* 2012;4:236-45.
- Zwart TC, et al. Long-Term Melatonin Therapy for Adolescents and Young Adults with Chronic Sleep Onset Insomnia and Late Melatonin Onset: Evaluation of Sleep Quality, Chronotype, and Lifestyle Factors Compared to Age-Related Randomly Selected Population Cohorts. *Healthcare (Basel).* 2018 Mar 2;6(1). pii: E23. doi: 10.3390/healthcare6010023
- Aversa S, Pellegrino S, Barberi I, Reiter RJ, Gitto E. Potential utility of melatonin as an antioxidant during pregnancy and in the perinatal period. *J Matern Fetal Neonatal Med.* 2012;25:207-21.
- Parry BL. Plasma melatonin circadian rhythm disturbances during pregnancy and postpartum in depressed women and women with personal or family histories of depression. *Am J Psychiatry.* 2008;165:1551-8.
- Nichols AJ, et al. An Open-Label Evaluator Blinded Study of the Efficacy and Safety of a New Nutritional Supplement in Androgenetic Alopecia: A Pilot Study. *J Clin Aesthet Dermatol.* 2017;10(2):52-56.
- Langan EA, et al. Thyrotropin-releasing hormone and oestrogen differentially regulate prolactin and prolactin receptor expression in female human skin and hair follicles in vitro. *Br J Dermatol.*

2010;162:1127-31.

- El Baba KA, Azar ST. Thyroid dysfunction in pregnancy. *Int J Gen Med.* 2012;5:227-30.
- Hughes EC, Taneja A. Telogen Effluvium. *StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2018 Jan-.2017 Nov 28. PMID:28613598*
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management. Curr Prob Dermatol Basel, Karger 2015;47: 97-106.*
- Vasantha L, et al. Biochemical changes in the skin in Kwashiorkor. *Am J Clin Nutr.* 1970;23:78–82.
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management. Curr Prob Dermatol Basel, Karger 2015;47: 97-106.*
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management. Curr Prob Dermatol Basel, Karger 2015;47: 97-106.*
- Lacarruba F, Micalli G, Tosti A. Scalp Dermoscopy or Trichoscopy. In *Alopecias: Practical evaluation and management. Curr Prob Dermatol Basel, Karger 2015;47: 21-32.*
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management. Curr Prob Dermatol Basel, Karger 2015;47: 97-106.*
- Doche I, Hordinsky MK, Valente NYS, Romiti R, Tosti A. Syphilitic Alopecia: Case Reports and Trichoscopic Findings. *Skin Appendage Disord.* 2017;3(4):222-224.
- Mubki T, Rudnicka L, Olszewska M, Shapiro J. Evaluation and diagnosis of the hair loss patient: part I. History and clinical examination. *J Am Acad Dermatol.* 2014 Sep;71(3):415.e1-415.e15
- Mubki T, Rudnicka L, Olszewska M, Shapiro J. Evaluation and diagnosis of the hair loss patient: part I. History and clinical examination. *J Am Acad Dermatol.* 2014;71(3):415.e1-415.e15.
- Guzman-Sanchez DA, et al. Alopecias Due to Drugs and Other Skin and Systemic Disorders. In *Alopecias: Practical evaluation and management. Curr Prob Dermatol Basel, Karger 2015;47: 97-106.*
- Roseborough IE, McMichael AJ Hair care practices in African-American patients. *Semin Cutan Med Surg.* 2009;28:103-8.
- Ustuner ET Baldness may be caused by the weight of the scalp: gravity as a proposed mechanism for hair loss. *Med Hypotheses.* 2008;71:505-14.
- DiMarco G, McMichael A. Hair Loss Myths. *J Drugs Dermatol.* 2017;16(7):690-694.
- Guzmán-Sánchez D. Proteoglycans replacement therapy in Telogen Effluvium. A novel treatment and potential adjuvant therapy. A Pilot Study. *World Congress of Hair Research 2017; P-224,207.*
- Rebora A: Telogen Effluvium revisited. *G Ital Dermatol Venereol* 2014;149:47-54.
- Mirmiiranii P. Managing Hair loss in midlife women. *Maturitas* 2013;74:119-122
- Perera E, Sinclair R. Treatment of chronic telogen effluvium with oral minoxidil: A retrospective study. *F1000Res.* 2017 Sep 6;6:1650.
- Miteva M1, Misciali C, Fanti PA, Vincenzi C, Romanelli P, Tosti A. Permanent alopecia after systemic chemotherapy: a clinicopathological study of 10 cases. *Am J Dermatopathol.* 2011 Jun;33(4):345-50
- Yeager CE, Olsen EA. Treatment of chemotherapy-induced alopecia. *Dermatol Ther.* 2011 Jul-Aug;24(4):432-42.
- Zhang L, Zhou Q, Ma L, Wu Z, Wang Y. Meta-analysis of dermatological toxicities associated with sorafenib. *Clin Exp Dermatol.* 2011 Jun;36(4):344-50
- Rosenbaum SE, Wu S, Newman MA, West DP, Kuzel T, Lacouture ME. Dermatological reactions to the multitargeted tyrosine kinase inhibitor sunitinib. *Support Care Cancer.* 2008 Jun;16(6):557-66.
- Vano-Galvan S, Ríos-Buceta L, Ma DL, Fernández-Chacón C, Viera JC, Jaén P. Cetuximab-induced hypertrichosis of the scalp and eyelashes. *J Am Acad Dermatol.* 2010 Mar;62(3):531-3
- Beccastrini E, Squatrito D, Emmi G, Fabbri P, Emmi L. Alopecia areata universalis during off-label treatment with Infliximab in a patient with Behçet disease. *Dermatol Online J.* 2010 Sep 15
- S. Vano-Galvan, P. Moreno-Martin, P. Jaén. Progressive trichomegaly. *Ned J Med* 2009 Jan;67 (1) 35-6
- Vañó-Galván, Sergio & Longo, Federico & Grillo, Emiliano & Jaén, Pedro. (2013). [Panitumumab-induced trichomegaly.]. *Medicina clinica.* 140. 10.1016/j.medcli.2013.01.006.
- Gerstner T, Lipinski C, Longin E, König S. Valproate-induced change in hair color. *J Am Acad Dermatol.* 2008 Feb;58(2 Suppl):S63-4.
- Noelia Rivera; Aram Boada; M. Isabel Bielsa, PhD; M. Teresa Fernández-Figuera, PhD; Enric

Carcereny; M Teresa Moran; Carlos Ferrándiz Hair Repigmentation During Immunotherapy Treatment With an Anti–Programmed Cell Death 1 and Anti–Programmed Cell Death Ligand 1 Agent for Lung Cancer. *JAMA Dermatol.* 2017; 153(11):1162-1165.

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	ALOPECIA ANDROGENÉTICA	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	x	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español/Inglés	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

Alopecia androgénica

- Metabolismo androgénico de la alopecia androgénica.
- Alopecias in childhood and adolescence.
- Alopecia femenina.
- Alopecia androgénica masculina.
- Charla magistral: Conceptos médicos de la alopecia androgénica masculina
- Novedades en el tratamiento de la alopecia androgénica: dutasterida, nuevos tópicos, prostaglandinas, microneedling, mesoterapia capilar, etc.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Randall VA. Dermatol Ther 2008; 21: 314-328. Vexiau et al. Arch Dermatol Res 2000; 292: 598-604. Cela et al. Eur J Endocrinol 2003; 149: 439-42.
- Rushton DH, et al. Br J Dermatol 1990; 123: 187-97. Schmidt et al. Gynecol Obstet Invest 1991; 31: 235-9. Price VH et al. J Am Acad Dermatol 2000;43: 768-76. Cousen P, Messenger A. Br J Dermatol. 2010 Feb 1.
- Li ST et al. Arch Pediatr Adolesc Med 2002; 156: 85.
- Cordain L et al. Arch Dermatol 2002; 138: 1584.
- Ellis BJ et al. Child Development 2000;71:485
- Ellis BJ et al. Child Development 2003; 74: 801.
- Orme S, Culler DR, Messenger AG. Br J Dermatol 1999; 141:521-3.
- Tosti A et al. Br J Dermatol. 2005;152: 556-9
- Olsen E. J Am Acad Dermatol 2001; 45: S70
- Rakowska et al. Int J Trichology 2009; 1: 123-30.

- de Lacharrière et al. *Arch Dermatol.* 2001; 137:641-6
- Guarrera & Rebora. *Dermatology.* 2005; 210: 18-20
- Kibar et al. *Ann Dermatol.* 2014; 26: 478-84.
- Deloche et al. *Arch Dermatol Res.* 2004; 295: 422-8.
- Rushton & Gilkes *Clin Exp Dermatol* 2010; 36: 204-5
- Rai AK. *Indian Dermatol Online J.* 2017 Mar-Apr;8(2):147-148
- Price & Gummer. *J Am Acad Dermatol.* 1989; 20: 249-56.
- Dey & Thawani. *Pediatr Dermatol.* 2013; 30: 579-83.
- Nisha S. Chandran et al. *Pediatr Dermatol.* 2014; 3: 389-409.
- Sahana MS. *Int J Trichology* 2015; 7: 138-9.
- Swink SM, Castelo-Soccio L. *Pediatr Dermatol.* 2016 Sep;33(5):507-10.
- Srinivas SM. Loose Anagen Hair Syndrome. *Int J Trichology.* 2015Jul-Sep;7(3):138-9.
- McDonald KA, Shelley AJ, Colantonio S, Beecker J. Hair pull test:Evidence-based update and revision of guidelines. *J Am Acad Dermatol.* 2017Mar;76(3):472-477.
- Piraccini et al, *Eur J Dermatol* 1993; 3:597-8
- Redler et al *J Am Acad Dermatol* 2011; 64: e45-50
- Pinto AC, et al. *An Bras Dermatol.* 2017 Jan-Feb;92(1):118-120.
- Taylor & Bhagwandas. *Br J Dermatol.* 2014 Apr 28.
- Rothbart et al. *Cochrane Database Syst Rev.* 2013 Nov 8;11:CD007662
- Bloch et al. *J Am Acad Child Adolesc Psychiatry.* 2013; 52: 231-40.
- Iorizzo M and Oranje AP. *Expert Opin Pharmacother* 2061; 17: 1767-73
- Francesca Lolli, Francesco Pallotti, Alfredo Rossi, Maria C. Fortuna, Gemma Caro, Andrea Lenzi, Andrea Sansone, Francesco Lombardo. Androgenetic alopecia: a review. *Endocrine* (2017) 57:9–17
- Shigeki Inui and Satoshi Itami. *Experimental Dermatology*, 2013, 22, 168–171
- A. Lis-Swiezty,* H. Arasiewicz, I. Ranosz-Janicka, L. Brzezinska-Wcislo. Serum androgens and prostate-specific antigen levels in androgenetic alopecia: is there a difference between frontal and vertex baldness? DOI: 10.1111/jdv.14758 JEADV
- Gustavo Jose Leiros 1, Julieta María Ceruti 1, María Lía Castellanos, Ana Gabriela Kusinsky, María Eugenia Balaña. Androgens modify Wnt agonists/antagonists expression balance in dermal papilla cells preventing hair follicle stem cell differentiation in androgenetic alopecia. *Molecular and Cellular Endocrinology* 439 (2017) 26e34
- Mongtagna trichology, Junio 2017
- Gubelin Harcha W, Barbosa Martínez J, Tsai T-F, Katsuoka K, Kawashima M, Tsuboi R, et al. A randomized, active- and placebo-controlled study of the efficacy and safety of different doses of dutasteride versus placebo and finasteride in the treatment of male subjects with androgenetic alopecia. *J AM Acad Dermatol.* 2014; 70:489-98.
- Irwig MS. Androgen levels and semen parameters among former users of finasteride with persistent sexual adverse effects. *JAMA Dermatol.* 2014; On line septiembre 17. DOI: 10.1001/jamadermatol.2014.1830.3.0.
- Traish, AM. The Dark Side of 5 α -Reductase Inhibitors' Therapy: Sexual Dysfunction, High Gleason Grade Prostate Cancer and Depression. *Korean J Urol.* 2014 Jun;55(6):367-79. doi: 10.4111/kju.2014.55.6.367. Epub 2014 Jun 16.
- Ganzer CA. Persistent Sexual, Emotional, and Cognitive Impairment Post-Finasteride: A Survey of Men Reporting Symptoms. *Am J Mens Health.* 2014 Jun 13. pii: 1557988314538445.
- Cecchin E, De Mattia E, Mazzon G, Cauci S, Trombetta C, Toffoli G. A Pharmacogenetic Survey of Androgen Receptor (CAG) n and (GGN) n Polymorphisms in Patients Experiencing Long-term Side Effects After Finasteride Discontinuation. *Int J Biol Markers.* 2014 May 17:0. doi: 10.5301/jbm.5000095.
- Nasiri Amiri F, Ramezani Tehrani F, Esmailzadeh S, Tohidi M, Azizi F, Basirat Z. Sexual function in women with polycystic ovary syndrome and their hormonal and clinical correlations. *Int J Impot Res.* 2017
- Gerkowicz A, Chyl-Surdacka K, Krasowska D, Chodorowska G. The Role of Vitamin D in Non-Scarring Alopecia. *Int J Mol Sci.* 2017 Dec 7;18(12). pii: E2653. doi: 10.3390/ijms18122653.

- Ferrando J, García-García SC, González-de-Cossío AC, Bou L, Navarra E. A Proposal of an Effective Platelet-rich Plasma Protocol for the Treatment of Androgenetic Alopecia. *Int J Trichology*. 2017 Oct-Dec;9(4):165-170. doi: 10.4103/ijt.ijt_27_17.
- Moreno-Arrones OM, Becerra A, Vano-Galvan S. Therapeutic experience with oral finasteride for androgenetic alopecia in female-to-male transgender patients. *Clin Exp Dermatol*. 2017 Oct;42(7):743-748. doi: 10.1111/ced.13184. Epub 2017 Jul 10.
- Siavash M, Tavakoli F, Mokhtari F. Comparing the Effects of Zinc Sulfate, Calcium Pantothenate, Their Combination and Minoxidil Solution Regimens on Controlling Hair Loss in Women: A Randomized Controlled Trial. *J Res Pharm Pract*. 2017 Apr-Jun;6(2):89-93. doi: 10.4103/jrpp.JRPP_17_17.
- Miksza KF, Brenner FM, Andreola GM, Sakiyama PH. Alopecia in patients with vitamin D-resistant rickets type-II. *An Bras Dermatol*. 2017 Mar-Apr;92(2):286-287. doi: 10.1590/abd1806-4841.20175706.
- Ring CM, Keller MS. Effect of camouflaging agents on psychologic well-being: A cross-sectional survey of hair loss patients. *J Am Acad Dermatol*. 2017 Jun;76(6):1186-1189. doi: 10.1016/j.jaad.2017.01.014.
- Luhao Liu, Shankun Zhao, Futian Li, Ermao Li, Ran Kang, Lianmin Luo, Jintai Luo, PhD, Shawpong Wan, PhD, and Zhigang Zhao, PhD Effect of 5 α -Reductase Inhibitors on Sexual Function: A Meta-Analysis and Systematic Review of Randomized Controlled Trials. *J Sex Med* 2016; 1-14
- Walter Gubelin Harcha, Julia Barboza Martínez, Tsen-Fang Tsai, Kensei Katsuoka, Makoto Kawashima, Ryoji Tsuboi, Allison Barnes, Geraldine Ferron-Brady, PharmD, PhD, and Dushen Chetty. A randomized, active- and placebo-controlled study of the efficacy and safety of different doses of dutasteride versus placebo and finasteride in the treatment of male subjects with androgenetic alopecia. *AM ACAD DERMATOL* 2014
- Vañó-Galván S, Camacho F. Novedades terapéuticas en tricología. *Actas Dermosifiliogr*. 2016.

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	ALOPECIA AREATA. ALOPECIA POR FACTORES EXTERNOS, ENFERMEDADES SISTÉMICAS Y EN SITUACIONES ESPECIALES	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	4	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	X	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español/Inglés	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	40
Número de horas de trabajo personal del estudiante	60
Total horas	100

CONTENIDOS (Temario)

Alopecia areata.

- Epidemiología y cuadros clínicos de la alopecia areata y patogenia.
- Diagnóstico de la alopecia areata.
- What's new in the treatment of Alopecia Areata.
- Tratamiento de la Alopecia areata.
- Alopecia areata infantil.
- Algoritmo resumen de alopecias no cicatriciales: AGA, ET, AA.

Alopecias por factores externos: tricotilomanía, tracción. Alopecias por enfermedades sistémicas y Alopecias en situaciones especiales – embarazo y el pelo en pacientes oncológicos.

- Tricotilomanía y alopecia por tracción.
- Alopecias por enfermedades sistémicas.
- Alopecias en situaciones especiales y embarazo.
- El pelo en el paciente oncológico.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Kennedy Crispin et al. Safety and efficacy of the JAK inhibitor tofacitinib citrate in patients with alopecia areata. JCI Insight. 2016 Sep 22;1(15):e89776.
- Mackay-Wiggan J Update on clinical research in alopecia areata
- Alopecia Areata Research Summit NY Nov 14-15, 2016
- Liu et al . Tofacitinib for the treatment of severe alopecia areata and variants: A study of 90 patients. J Am Acad Dermatol. 2017 Jan;76
- Craiglow BG et al . Tofacitinib for the treatment of alopecia areata and variants in adolescents. J Am

Acad Dermatol. 2017 Jan;76(1):29-32.

- Bergfeld W Cleveland clinic's alopecia areata tofacitinib treatment results, a retrospective therapeutic study. Alopecia Areata Research Summit NY Nov 14-15, 2016
- Crispin et al Safety and efficacy of the JAK inhibitor tofacitinib citrate in patients with alopecia areata JCI insight October 2016
- Mackay-Wiggan JAlopecia Areata Research Summit NY Nov 14-15, 2016
- Liu LY, Craiglow BG, King BA. Tofacitinib 2% ointment, a topical janus kinase inhibitor, for the treatment of alopecia areata: a pilot study of 10 patients. J Am Acad Dermatol 2017 e-pub
- Alkhalifah A, Alsantali A, Wang E, McElwee KJ, Shapiro J. Alopecia areata update: part II. Treatment. J Am Acad Dermatol. 2010;62(2):191-202
- Galan Gutierrez M, Ruiz Villaverde R. Tratamiento de la alopecia areata. Piel. 2013;28(7):419-427
- Abell E, Munro DD. Intralesional treatment of alopecia areata with triamcinolone acetonide by jet injector. Br J Dermatol 1973;88:55-9.
- Ferrando J, Moreno-Arias GA. Multi-injection plate for intralesional corticosteroid treatment of patchy alopecia areata. Dermatol Surg. 2000;26:690-1
- Schmoeckel C, Weissmann I, Plewig G, Braun-Falco O. Treatment of alopecia areata by anthralin-induced dermatitis. Arch Dermatol 1979;115:1254-5
- Tang L, Cao L, Sundberg JP, Lui H, Shapiro J. Restoration of hair growth in mice with an alopecia areata-like disease using topical anthralin. Exp Dermatol 2004;13:5-10.
- MacDonald Hull SP, Wood ML, Hutchinson PE, Sladden M, Messenger AG. Guidelines for the management of alopecia areata. Br J Dermatol 2003;149:692-9.
- Aita & Christiano. Dermatologic Therapy 2001; 14: 329
- Wohlmuth-Wieser I, Osei JS, Norris D, Price V, Hordinsky MK, Christiano A, Duvic M. Childhood alopecia areata-Data from the National Alopecia Areata Registry. Pediatr Dermatol. 2018 Jan 15.
- Petukhova et al. Nature. 2010 Jul 1;466(7302):113-7.
- Acta Dermatoven APA Vol 20, 2011.
- Taketomo Y et al. Hum Immunol 2017 Feb;78(2):185-189.
- Ito & Tokura. Exp Dermatol. 2014; 23:787-91.
- Chu C-H et al. Pediatric Dermatology 2016; 33: e218-9.
- Paus & Bertolini. J Investig Dermatol Symp Proc. 2013; 16(1): S25-7.
- Ito T. Clin Dev Immunol. 2013;2013:348546.
- Hordinsky MK. Alopecia Areata: The Clinical Situation. J Investig Dermatol Symp Proc. 2018 Jan;19(1):S9-S11. Caldwell CC, Saikaly SK, Dellavalle RP, Solomon JA. Prevalence of pediatric alopecia areata among 572,617 dermatology patients. J Am Acad Dermatol. 2017 Nov;77(5):980-981.
- Acta Dermatoven APA Vol 20, 2011
- Patel D, Li P, et al. JAMA Dermatol. 2017 Dec1;153(12):1307-1310.
- Sorrell J, et al. Pediatr Dermatol. 2017 Sep;34(5):e271-e272.
- Ghaffari J, et al. Open Access Maced J Med Sci. 2017 Jun 11;5(3):305-309.
- Olsen et al. J Am Acad Dermatol. 2004;51:440-7
- Tosti et al. Ped Dermatol 1994; 11: 112
- Rebora A. Dermatologica 1987;174:214-8.
- Tosti et al. J Am Acad Dermatol 2008;59:64-7.
- Bernardis E, Nukpezah J, Li P, Christensen T, Castelo-Soccio L. Pediatric severity of alopecia tool. Pediatr Dermatol. 2017 Nov 6.
- Christensen T, et al. Skin Appendage Disord. 2017 Aug;3(3):115-118.
- Aschenbeck KA, et al. Pediatr Dermatol. 2017 Jul;34(4):427-432
- Cochrane Database Syst Rev. 2008 Apr 16;(2):CD004413. Interventions for alopecia areata. Delamere F, Sladden M, Dobbins H, Leonardi-Bee J
- Peloquin L, Castelo-Soccio L. Alopecia Areata: An Update on Treatment Options for Children. Paediatr Drugs. 2017 Oct;19(5):411-422.
- Lenane et al. JAMA Dermatol. 2014; 150: 47-50.
- Tosti, Piraccini, et al. JAAD 2003; 49: 96-98
- Tosti et al. JAAD 2003; 49: 96

- Tosti et al. *J Eur Acad Dermatol Venereol.* 2006 Nov;20(10):1243-7.
- MacDonald Hull et al. *British Journal of Dermatology* 2003;149: 692-9
- Smith et al. *Pediatr Dermatol.* 2015 Apr 15.
- Jahn-Bassler K et al. *JDDG* 2017; 42-7.
- Chen CA, Carlberg V, Kroshinsky D. Angioedema After Squaric Acid Treatment in a 6-Year-Old Girl. *Pediatr Dermatol.* 2017 Jan;34(1):e44-e46.
- Fiedler-Weiss VC, Buys CM. *Arch Dermatol.* 1987; 123: 1491-3.
- Sasmaz S, Arican O. *Am J Clin Dermatol.* 2005; 6:403-6.
- Ozdemir M and Balevi A. *Pediatric Dermatology* 2017; 1-5.
- Byun et al. *Dermatology.* 2015 May 21.
- Darwin E, Arora H, Hirt PA, Wikramanayake TC, Jimenez JJ. A review of monochromatic light devices for the treatment of alopecia areata. *Lasers Med Sci.* 2017 Dec 17. Fenniche S, Hammami H, Zaouak A. Association of khellin and 308-nm excimer lamp in the treatment of severe alopecia areata in a child. *J Cosmet Laser Ther.* 2017 Oct 11:1-3.
- Strober BE et al. Etanercept does not effectively treat moderate to severe alopecia areata: an open-label study. *J Am Acad Dermatol.* 2005; 52: 1082-4.
- Price VH. Presentation at the hair symposium AAD 64th Annual Meeting. San Francisco, CA. March 3-7, 2006.
- Heffernan MP et al. Alefacept for alopecia areata. *Arch Dermatol.* 2005; 141:1513-16.
- Vila & Camacho. *Int J Trichology.* 2010; 2: 86-8.
- Borchert M et al. *Clinical Ophthalmology* 2016; 10: 419-29.
- Biran R et al. *J Dermatol Sci.* 2015; 78: 11-20
- Gilhar A et al. *Autoimmun Rev,* 2016; 15:726-35.
- Hordisky MK. *J Investig Dermatol Symp Proc,* 2015; 17: 44-6.
- Xing et al. *Nat Med.* 2014; 20: 1043-9.
- Craiglow & King. *J Invest Dermatol.* 2014 Jun 18.
- Pieri et al. *Am J Hematol.* 2015; 90: 82-3.
- Jabbari A et al. *EBioMedicine.* 2015 Feb 26;2(4):351-5.
- Bayart CB, et al. *J Am Acad Dermatol.* 2017
- Betz RC, Petukhova L, Ripke S, et al. Genome-wide meta-analysis in alopecia areata resolves HLA associations and reveals two new susceptibility loci. *Nat Commun.* 2015;6: 5966.
- Dai Z, Xing L, Cerise J, et al. CXCR3 blockade inhibits T cell migration into the skin and prevents development of alopecia areata. *J Immunol.* 2016;197:1089-1099
- de Medeiros AKA, Speeckaert R, Desmet E, Van Gele M, De Schepper S, Lambert J. JAK3 as an emerging target for topical treatment of inflammatory skin diseases. *PloS One.* 2016; 211:e0164080
- Fischer J, Degenhardt F, Hofmann A, et al. Genomewide analysis of copy number variants in alopecia areata in a Central European cohort reveals association with MCHR2. *Exp Dermatol.* 2017;26:536-541.
- Wang EHC, DeStefano GM, Patel AV, et al. Identification of differentially expressed miRNAs in alopecia areata that target immune-regulatory pathways. *Genes Immun.* 2017;18:100-104.
- Xing L, Dai Z, Jabbari A, et al. Alopecia areata is driven by cytotoxic T lymphocytes and is reversed by JAK inhibition. *Nat Med.* 2014;20:1043-1049.
- Safavi K. Prevalence of alopecia areata in the First National Health and Nutrition Examination Survey. *Arch Dermatol* 1992; 128:702.
- Kyriakis KP, Paltatzidou K, Kosma E, Sofouri E, Tadros A, Rachioti E. Alopecia areata prevalence by gender and age. *J Eur Acad Dermatol Venereol* 2009;23:572-3.
- Barahmani N, Schabath MB, Duvic M. History of atopy or autoimmunity increases risk of alopecia areata. *J Am Acad Dermatol* 2009;61:581-91.
- Chu SY, Chen YJ, Tseng WC, et al. Comorbidity profiles among patients with alopecia areata: the importance of onset age, a nationwide population-based study. *J Am Acad Dermatol* 2011;65:949-56.
- Blaumeiser B, Van der Goot I, Fimmers R, et al. Familial aggregation of alopecia areata. *J Am Acad Dermatol.* 2006;54:627-32.

- Colombe BW, Price VH, Khoury EL, et al. HLA class II antigen associations help to define two types of alopecia areata. *J Am Acad Dermatol*. 1995;33:757-64.
- De Andrade M, Jackow CM, Dahm N, et al. Alopecia areata in families: association with the HLA locus. *J Invest Dermatol Symp Proc*. 1999;4:220-3.
- Martinez-Mir A, Zlotogorski A, Gordon D, et al. Genome wide scan for linkage reveals evidence of several susceptibility loci for alopecia areata. *Am J Hum Genet* 2007;80:316-28.
- Petukhova L, Duvic M, Hordinsky M, et al. Genome-wide association study in alopecia areata implicates both innate and adaptive immunity. *Nature* 2010;466: 113-7.
- Garcia-Hernandez MJ, Torres MJ, Palomares JC, Rodriguez-Pichardo A, Aznar J, Camacho F. No evidence of Cytomegalovirus DNA in Alopecia Areata. *J Invest Dermatol*, 1998: 110:185.
- Crosby DL, Gammon WR. Seasonal alopecia areata with atopy. *J Am Acad Dermatol*, 1989;21:806-7.
- Gupta MA, Gupta AK, Watteel GN. Stress and alopecia areata: a psychodermatologic study. *Acta Derm Venereol*. 1997;77:296-8.
- Gülec A, Tanverdi N, Dürü C, Saray Y, Akca C. The role of psychological factors in alopecia areata and the impact of the disease on the quality of life. *Int J Dermatol*. 2004;43:352-6.
- Peters EMJ, Liotiri S, Bodo E, Hagen E, Biro T, Arck PC, Paus R. Probing the effects of stress mediator on the human hair follicle. *Am J Pathol*. 2007: 171:1872-86.
- Daly TJ. Alopecia areata has low plasma levels of the vasodilator/immunomodulator calcitonin gene-related peptide. *Arch Dermatol*. 1998;134:1164-5.
- Botchkarev VA, Yaar M, Peters EM, Raychaudhuri SP, Botchkareva NV, Marconi A, Raychaudhuri SK, Paus R, Pincelli C. Neurotrophins in skin biology and pathology. *J Invest Dermatol*. 2006;126:1719-27.
- Hordinsky MK, Ericson M, Snow D, Boeck C, Lee WS. Peribulbar innervation and substance P expression following non-permanent injury to the human scalp hair. *J Invest Dermatol Symp Proc*. 1999;4:316-9.
- Farah R, Junqueira A, Guo H, Gallus N, Ericson M, Boeck C, Hordinsky M. Differences in mean current intensity required to evoke sensation in c-fibers in the scalp of Alopecia areata subjects and normal controls. Abstract 669. *J Invest Dermatol*. 2010;130(S1):S112.
- Joachim RA, Kuhlmei A, Dinh QT, Handjiski B, Fischer T, Peters EMJ, Klapp BF, Paus R, Arck PC. Neuronal plasticity of the brain-skin connection: stress-triggered up-regulation of neuropeptides in dorsal root ganglia and skin via nerve growth factor-dependent pathways. *J Mol Med*. 2007;85:1369-78.
- Daly TJ. Alopecia areata has low plasma levels of the vasodilator/immunomodulator calcitonin gene-related peptide. *Arch Dermatol*. 1998;134:1164-5.
- Peters EMJ, Ericson M, Hosoi J, Seiffert K, Hordinsky M, Ansel JC, Scholzen TE. Neuropeptide control mechanisms in cutaneous biology: physiological and clinical significance. *J Invest Dermatol*. 2006;126:1937-47.
- Gilhar A, Etzioni A, Paus R. Alopecia Areata. *N Engl J Med* 2012;366(16):1515-25.
- Christoph T, Müller-Röver S, Audring H, et al. The human hair follicle immune system: cellular composition and immune privilege. *Br J Dermatol* 2000;142:862-73.
- Meyer KC, Klatte JE, Dinh HV, et al. Evidence that the bulge region is a site of relative immune privilege in human hair follicles. *Br J Dermatol* 2008;159:1077-85.
- Ito T, Ito N, Bettermann A, Tokura Y, Takigawa M, Paus R. Collapse and restoration of MHC class I-dependent immune privilege: exploiting the human hair follicle as a model. *Am J Pathol* 2004;164:623-34.
- Höglund P, Brodin P. Current perspectives of natural killer cell education by MHC class I molecules. *Nat Rev Immunol* 2010;10:724-34.
- Ito T, Ito N, Saathoff M, et al. Maintenance of hair follicle immune privilege is linked to prevention of NK cell attack. *J Invest Dermatol* 2008;128:1196-206.
- Paus R, Nickoloff BJ, Ito T. A 'hairy' privilege. *Trends Immunol* 2005;26:32-40.
- Paus R, Slominski A, Czarnecki BM. Is alopecia areata an autoimmune-response against melanogenesis-related proteins, exposed by abnormal MHC class I expression in the anagen hair bulb? *Yale J Biol Med* 1993;66:541-54.

- Peters EM, Liotiri S, Bodó E, et al. Probing the effects of stress mediators on the human hair follicle: substance P holds central position. *Am J Pathol* 2007;171: 1872-86.
- Bodemer C, Peuchmaur M, Fraitag S, Chatenoud L, Brousse N, DeProst Y. Role of cytotoxic T cells in chronic alopecia areata. *J Invest Dermatol* 2000;114:112-6.
- Cetin ED, Savk E, Uslu M, Eskin M, Karul A. Investigation of the inflammatory mechanisms in alopecia areata. *Am J Dermatopathol* 2009;31:53-60.
- Tobin DJ. Characterization of hair follicle antigens targeted by the anti-hair follicle immune response. *J Invest Dermatol Symp Proc* 2003;8:176-81.
- Hedstrand H, Perheentupa J, Ekwall O, et al. Antibodies against hair follicles are associated with alopecia totalis in autoimmune polyendocrine syndrome type 1. *J Invest Dermatol* 1999;113:1054-8.
- Gilhar A, Pillar T, Assy B, David M. Failure of passive transfer of serum from patients with alopecia areata and alopecia universalis to inhibit hair growth in transplants of human scalp skin grafted on to nude mice. *Br J Dermatol* 1992;126: 166-71.
- Villasante F and Miteva M. Epidemiology and burden of Alopecia Areata : a systematic review. *Clin Cosmet Invest Dermatol* 2015; 24: 397-403.
- Miller R, Conic RZ, Bergfeld W, Mesinkovska NA. Prevalence of Comorbid Conditions and Sun-Induced Skin Cancers in Patients with Alopecia Areata. *J Invest Dermatol Symp Proc.* 2015 ;17:61-62.
- Biran R, Zlotogorski A, Ramot Y. The genetics of alopecia areata: new approaches, new findings, new treatments. *J Dermatol Sci.* 2015 ;78:11-20.
- Lee HJ, Cho DH and Park KH. IL-18 an cutaneous inflammatory disease. *Int J Mol Sci* 2015; 16: 29357-29369.
- Betz RC, Petukhova L, Ripke S, et al. Genome-wide meta-analysis in alopecia areata resolves HLA associations and reveals two new susceptibility loci. *Nat Commun.* 2015;6: 5966.
- Dai Z, Xing L, Cerise J, et al. CXCR3 blockade inhibits T cell migration into the skin and prevents development of alopecia areata. *J Immunol.* 2016;197:1089-1099
- de Medeiros AKA, Speeckaert R, Desmet E, Van Gele M, De Schepper S, Lambert J. . JAK3 as an emerging target for topical treatment of inflammatory skin diseases. *PloS One.* 2016; 211:e0164080-
- Fischer J, Degenhardt F, Hofmann A, et al. Genomewide analysis of copy number variants in alopecia areata in a Central European cohort reveals association with MCHR2. *Exp Dermatol.* 2017;26:536-541.
- Wang EHC, DeStefano GM, Patel AV, et al. Identification of differentially expressed miRNAs in alopecia areata that target immune-regulatory pathways. *Genes Immun.* 2017;18:100-104.
- Xing L, Dai Z, Jabbari A, et al. Alopecia areata is driven by cytotoxic T lymphocytes and is reversed by JAK inhibition. *Nat Med.* 2014;20:1043-1049.
- Mazuecos J, Rodriguez-Pichardo A, Camacho F. Pubic trichotillomania in an adult man. *Br J Dermatol* 2001; 145: 1034-5
- Neila Iglesias J, Rodriguez-Pichardo A, Garcia-Bravo B, Camacho F. Masqueradings of trichotillomania in a family with monilethrix. *Eur J Dermatol.* 2011;21: 133.
- Trichodaganomania: The compulsive habit of biting one's own hair. Jafferany M et al. *J Am Acad Dermatol.*2009
- Rodrigues-Barata AR, Tosti A., Rodriguez-Pichardo A. y Camacho F. N-acetylcysteina in the treatment of trichotillomania. In *J Trichol* 2012; 4: 176-8.
- RM Trueb, Involvement of scalp and nails in lupus erythematosus. *Lupus* (2010) 19, 1078–1086
- Sujana Reddy, B.A., David Bushore, M.D., Alan Levy, M.D., and Robert B. Skinner Jr., M.D. Early Diffuse Alopecia in a Neonate with Congenital Syphilis. *Pediatric Dermatology* Vol. 23 No. 6 564–566, 2006
- Y Ye, Y Zhao, Y Gong, X Zhang, S Caulloo, B Zhang, Z Cai, J Yang, KJ McElwee and X Zhang. Non-scarring patchy alopecia in patients with systemic lupus erythematosus differs from that of alopecia areata. *Lupus* (2013) 22, 1439–1445
- P. Hernández-Bel*, B. Unamuno, J.L. Sánchez-Carazo, I. Febrer y V. Alegre. Alopecia sifilítica:

presentación de 5 casos y revisión de la literatura. Alopecia sifilítica: presentación de 5 casos y revisión de la literatura

- Alexander Zink · Katharina Kaliebe · Christoph D. Spinner. Alopecia syphilitica diffusa. *Infection* (2015) 43:783–784
- David A. Wetter and Gregory P. Henderson. Syphilitic Alopecia. (*Intern Med* 52: 2013, 2013)
- X. Wortsman, S. Alvarez.. Coexistence of frontal fibrosing alopecia and discoid lupus erythematosus of the scalp in 7 patients: just a coincidence? *JEADV* 2016, 30, 124–200
- Siamak Moghadam-Kia, MD, Andrew G. Franks Jr. Autoimmune Disease and Hair Loss *Dermatol Clin* 31 (2013) 75–91
- Bianca Maria Piraccini Alessandro Broccoli Michela Starace Valeria Gaspari Antonietta D’Antuono Emi Dika Annalisa Patrizi. Hair and Scalp Manifestations in Secondary Syphilis: Epidemiology, Clinical Features and Trichoscopy. *Dermatology* 2015;231:171–176
- Direkrit Chiewchengchol, Ruth Murphy, Steven W Edwards² and Michael W Beresford. Mucocutaneous manifestations in juvenile-onset systemic lupus erythematosus: a review of literature. Chiewchengchol et al. *Pediatric Rheumatology* 2015, 13:1
- Noelia Rivera; Aram Boada, M. Isabel Bielsa, PhD; M. Teresa Fernández-Figueras, PhD; Enric Carcereny, MTeresa Moran, Carlos Ferrándiz, Hair Repigmentation During Immunotherapy Treatment With an Anti–Programmed Cell Death 1 and Anti–Programmed Cell Death Ligand 1 Agent for Lung Cancer

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	ALOPECIAS CICATRICIALES. ALOPECIAS CICATRICIALES PRIMARIAS LINFOCÍTICAS	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	4	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	x	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	40
Número de horas de trabajo personal del estudiante	60
Total horas	100

CONTENIDOS (Temario)

Alopecias cicatriciales. Clasificación. Alopecias cicatriciales primarias linfocíticas.

- Alopecias cicatriciales: concepto, clasificación y mecanismo.
- Liquen plano pilar.
- Variantes clínicas de Liquen plano pilar.
- AFF: teorías etiopatogénicas, comorbilidades y clínica.
- Alopecia frontal fibrosante: manejo terapéutico.
- Lupus discoide, alopecia mucinosa y queratosis folicular espinulosa decalvante.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Sergio Vañó-Galván, Ana Rita Rodrigues-Barata, Marta Urech, Natalia Jiménez-Gómez, David Saceda-Corralo, John Paoli, Jesús Cuevas, Pedro Jaén. Depression of the frontal veins: A new clinical sign of frontal fibrosing alopecia. J Am Acad Dermatol, Vol. 72, Issue 6, p1087–1088
- Sergio Vañó-Galván, Ana M. Molina-Ruiz, Cristina Serrano-Falcón, Salvador Arias-Santiago, Ana R. Rodrigues-Barata, Gloria Garnacho-Saucedo, Antonio Martorell-Calatayud, Pablo Fernández-Crehuet, and others . Frontal fibrosing alopecia: A multicenter review of 355 patients . J Am Acad Dermatol, Vol. 70, Issue 4, p670–678
- Moreno-Ramirez D, Camacho Martinez F. Frontal fibrosing alopecia: a survey in 16 patients. J Eur Acad Dermatol Venereol. 2005;19:700-705.
- Vano-Galvan S, Rodrigues-Barata AR, Urech M, et al. Depression of the frontal veins: a new clinical sign of frontal fibrosing alopecia. J Am Acad Dermatol. 2015;72:1087-1088.
- Paradi Mirmirani, Bree Zimmerman J Am Acad Dermatol, Vol. 75, Issue 2, e63–e64
- Rudnicka, Malgorzata Olszewska, Adriana Rakowska. Springer-Verlag. Atlas of Trichoscopy. Lidia

London 2012.

- Pablo Fernández-Crehuet, Ana Rita Rodrigues-Barata, Sergio Vañó-Galván, Cristina Serrano-Falcón, Ana Maria Molina-Ruiz, Salvador Arias-Santiago, Antonio Martorell-Calatayud, Ramón Grimalt, and others. Trichoscopic features of frontal fibrosing alopecia: Results in 249 patients. *J Am Acad Dermatol*, Vol. 72, Issue 2, p357–359
- Athanassios Kolivras, Nathaniel Thompson, Curtis Thompson. Loss of cytokeratin-15 (CK15) expression is not specific for lichen planopilaris (LPP). *J Am Acad Dermatol*, Vol. 75, Issue 2, p428–429
- Derek V. Chan, Joseph Flynn, Rebecca Ziegler, Henry K. Wong. HLA-DR1 in familial frontal fibrosing alopecia. *J Am Acad Dermatol*, Vol. 73, Issue 1, e39
- Sergio Vañó-Galván, Ana M. Molina-Ruiz, Cristina Serrano-Falcón, Salvador Arias-Santiago, Ana R. Rodrigues-Barata, Gloria Garnacho-Saucedo, Antonio Martorell-Calatayud, Pablo Fernández-Crehuet, and others. Frontal fibrosing alopecia: A multicenter review of 355 patients. *J Am Acad Dermatol*, Vol. 70, Issue 4, p670–678
- Natasha Atanaskova Mesinkovska, Alejandra Tellez, Danyelle Dawes, Melissa Piliang, Wilma Bergfeld. The use of oral pioglitazone in the treatment of lichen planopilaris. *J Am Acad Dermatol*, Vol. 72, Issue 2, p355–356
- Melissa J. Danesh, Jenny E. Murase. Further research needed if finasteride is to become standard of care for frontal fibrosing alopecia (FFA). *J Am Acad Dermatol*, Vol. 74, Issue 4, e75.
- Christos Tziotzios, David A. Fenton, Catherine M. Stefanato, John A. McGrath. Finasteride is of uncertain utility in treating frontal fibrosing alopecia. *J Am Acad Dermatol*, Vol. 74, Issue 4, e73–e74
- Barry Ladizinski, Andrea Bazakas, M. Angelica Selim, Elise A. Olsen. *J Am Acad Dermatology*, Vol. 68, Issue 5, p749–755
- Pai VV, Kikkeri NN, Sori T, Dinesh U S. Graham-Little Piccardi Lassueur syndrome: An unusual variant of follicular lichen planus. *Int J Trichol* 2011;3:28-30
- Steglich, Raquel Bissacotti, Tonoli, Renata Elise, Pinto, Giselle Martins, Müller, Fernanda Melo, Guarenti, Isabelle Maffei, & Duvelius, Ernani Siegmann. (2012). Graham-Little Piccardi Lassueur Syndrome: case report. *Anais Brasileiros de Dermatologia*, 87(5), 775-777.
- Rawat R, Mahajan VK, Chander B, Mehta KS, Chauhan PS, Gupta M. Graham Little Piccardi Lassueur syndrome. *Our Dermatol Online*. 2016;7(1):114-116.
- MI. Fernández Canedo, P. De Unamuno Pérez, E. Fernández López, E. Blázquez Sánchez, A. Martín-Pascual. Síndrome de Graham-Little frente a liquen plano folicular Graham-Little syndrome versus follicular lichen planus. *Actas Dermosifiliogr* 2001;92:229-32 - Vol. 92 Núm.5
- Antonio JR, Lucca LCP, Borim MP, Rossi NCP, Oliveira GB. Case for diagnosis. GrahamLittle-Piccardi-Lassueur Syndrome. *An Bras Dermatol*. 2014;89(6):1003-4.
- Frontal fibrosing alopecia presenting with components of Piccardi-Lasseur-Graham-Little syndrome. Abbas O, Chedraoui, Ghosn S. *J Am Acad Dermatol* 2007;57:S15-8.
- Derek V. Chan, Francisca Kartono, Rebecca Ziegler, Nebila Abdulwahab, Nicholas DiPaola, Joseph Flynn, Henry K. Wong . *J Am Acad Dermatol*, Vol. 71, Issue 5, e208–e210
- Rivas MO, Antolín SC, Sambucety PS, González ES, Ruíz de Morales JG, Prieto MR. Frontal fibrosing alopecia and lichen planopilaris in HLA-identical mother and daughter. *Indian J Dermatol Venereol Leprol* 2015;81:162-5
- Ramanauskaite A, Trüeb RM. Facial papules in fibrosing alopecia in a pattern distribution (cicatricial pattern hair loss). *Int J Trichol* 2015;7:119-22
- Hair Growth and disorders. Blume-Peytavi U., Tosti A., Whiting D., Trueb R. Springer-Verlag Berlin. 2008.
- Primary cicatricial alopecias: histopathologic findings do not distinguish clinical variants. Mirmirani P et al. *J Am Acad Dermatol* 2005;52:637-43.
- Dermoscopic findings in different clinical variants of lichen planus. Is dermoscopy useful? Friedman P, Sabban EC, Marcucci C, Peralta R, Cabo H. *Dermatol Pract Concept* 2015;5(4):13.
- Primary cicatricial alopecias: clinicopathology of 112 cases. Tan E, Martinka M, Ball N, Shapiro J. *J Am Acad Dermatol* 2004;50:25-32.
- Frontal fibrosing alopecia presenting with components of Piccardi-Lasseur-Graham-Little syndrome.

- Abbas O, Chedraoui, Ghosn S. *J Am Acad Dermatol* 2007;57:S15-8.
- A histologic review of 27 patients with lichen planopilaris. Tandon Y, Somani N, Cevasco N, Bergfeld W. *J Am Acad Dermatol* 2008;59:91-8.
 - Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. Bolduc C, Sperling L, Shapiro J. *J Am Acad Dermatol* 2016;75:1081-99.
 - Arantxa Lopez-Pestaña, Anna Tuneu, Carmen Lobo, Nerea Ormaechea, José Zubizarreta, Susana Vildosola, and Elena Del Alcazar, Facial lesions in frontal fibrosing alopecia (FFA): Clinicopathological features in a series of 12 cases. *J AM ACAD DERMATOL.* n 2015
 - Abedini R, Hesari KK, Daneshpazhooh M, Ansari MS, Tohidinik HR, Ansari M. Validity of trichoscopy in the diagnosis of primary cicatricial alopecias. *Int J Dermatol* 2016;55:1106-1114.
 - Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia. Other lymphocytic primary cicatricial alopecias and neutrophilic and mixed primary cicatricial alopecias. *J Am Acad Dermatol* 2016;75:1101-17.
 - Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia. Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. *J Am Acad Dermatol* 2016;75:1081-99.
 - Suchonwanit P, Hector CE, Bin Saif GA, McMichael AJ. Factors affecting the severity of central centrifugal cicatricial alopecia. *Int J Dermatology* 2016;55: e338–e343.
 - Monteagudo B, Pérez-Valcarcel J, Mateo S, Fernández-Jorge B. Alopecia cicatricial centrífuga central. *Piel* 2016; 31:149-51.
 - Kolivras A, Thompson C. Primary scalp alopecia: new histopathological tools, new concepts and a practical guide to diagnosis. *J Cutan Pathol* 2017;44:53–69
 - Jeff C. Donovan. Finasteride-mediated hair regrowth and reversal of atrophy in a patient with frontal fibrosing alopecia. *JAAD Case Reports* 2015;1:353-5.
 - Bernardez C, Molina-Ruiz AM, Requena L. Histologic features of alopecias: Part II: Scarring alopecias. *Actas Dermosifiliogr.* 2014
 - Mendes-Bastos P, Camps-Fresneda A. Hair Transplantation for Frontal Fibrosing Alopecia: Part of the Solution? *Actas Dermosifiliogr.* 2015.
 - Bernárdez C, Molina-Ruiz AM, Requena L. Histopatología de las alopecias. Parte II: alopecias cicatriciales. *Actas Dermosifiliogr.* 2015;106:260-270.
 - Harries MJ, Trueb RM, Tosti A, Messenger AG, Chaudhry I, Whiting DA, Sinclair R, Griffiths CEM, Paus R. How not to get scar (r)ed: pointers to the correct diagnosis in patients with suspected primary cicatricial alopecia. *Br J Dermatol.* 2009;160:482-501.
 - Somani N, Bergfeld W F. Cicatricial alopecia: classification and histopathology. *Dermatol Ther.* 2008;21:221-237.
 - Ronglioletti F, Christana K. Cicatricial (scarring) alopecias an overview of pathogenesis, classification, diagnosis, and treatment. *Am J Clin Dermatol.* 2012;13:247-260.
 - Miteva M, Tosti A. Dermatoscopy guided scalp biopsy in cicatricial alopecia. *J EADV* 2013;27:1299-1303.
 - Ana Filipa Pedrosa, Ana Filipa Duarte, Eckart Haneke, PhD,a,d and Osvaldo Correia. Yellow facial papules associated with frontal fibrosing alopecia: A distinct histologic pattern and response to isotretinoin. *J AM ACAD DERMATOL.* OCTOBER 2017
 - Siemens HW. Keratosis follicularis spinulosa decalvans. *Arch Dermatol Syphilol.*1926;151:384-7.
 - Castori M, Covaciu C, Paradisi M, Zambruno G. Clinical and genetic heterogeneity in keratosis follicularis spinulosa decalvans. *Eur J Med Genet.*2009;52:53-8.
 - Rand R, Baden HP. Keratosis follicularis spinulosa decalvans. Report of two cases and literature review. *Arch Dermatol.*1983;119:22-6.
 - Judge M.R., McLean W.H.I., and Munro C.S.: Disorders of keratinisation. In Burns D.A., Breathnach S.M., Cox N., and Griffith C.S. (eds): *Rook's Textbook of Dermatology*, 8th ed. Oxford: Wiley Blackwell, 2010. pp. 72-93.
 - Oosterwijk JC, Nelen M, van Zandvoort PM, van Osch LD, Oranje AP, Wittebol Post D et al. Linkage analysis of keratosis follicularis spinulosa decalvans, and regional assignment to human

- chromosome Xp21.2-p22.2. *Am J Hum Genet.*1992;50:801-7.
- Oosterwijk JC, Nelen M, van Zandvoort PM et al. Confirmation of X-linked inheritance and provisional mapping of the keratosis follicularis spinulosa decalvans gene on Xp in a large Dutch family. *Ophthalmic Paediatr Genet.*1992;13:27-30.
 - Oranje AP, van Osch LD, Oosterwijk JC. Keratosis pilaris atrophicans. One heterogeneous disease or a symptom in different clinical entities? *Arch Dermatol.*1994;130:469-75.
 - Oosterwijk JC, van der Wielen MJ, van de Vosse E, Voorhoeve E, Bakker E. Refinement of the localisation of the X linked keratosis follicularis spinulosa decalvans (KFSD) gene in Xp22.13-p22.2. *J Med Genet.*1995;32:736-9.
 - Porteous ME, Strain L, Logie LJ, Herd RM, Benton EC. Keratosis follicularis spinulosa decalvans: confirmation of linkage to Xp22.13-p22.2. *J Med Genet.*1998;35:336-7.
 - Oosterwijk JC, Richard G, van der Wielen MJ, van de Vosse E, Harth W, Sandkuijl LA, et al. Molecular genetic analysis of two families with keratosis follicularis spinulosa decalvans: refinement of gene localization and evidence for genetic heterogeneity. *Hum Genet.*1997;100:520-4.
 - Aten E, Brasz LC, Bornholdt D, Hooijkaas IB, Porteous ME, Sybert VP, et al. Keratosis follicularis spinulosa decalvans is caused by mutations in MBTPS2. *Hum Mutat.* 2010;31:1125-33.
 - Fong K, Wedgeworth EK, Lai-Cheong JE, et al: MBTPS2 mutation in a British pedigree with keratosis follicularis spinulosa decalvans. *Clin Exp Dermatol.* 2012;37:631-634.
 - Khumalo NP, Loo WJ, Hollowood K, et al: Keratosis pilaris atrophicans in mother and daughter. *J Eur Acad Dermatol Venereol.* 2002;16:397-400.
 - Kuokkanen K. Keratosis follicularis spinulosa decalvans in a family from northéeme Finland. *Acta Derm Venereol.* 1971;51:146-50.
 - Baden HP, Byers HR. Clinical findings, cutaneous pathology, and response to therapy in 21 patients with keratosis pilaris atrophicans. *Arch Dermatol* 1994; 130:469-75.
 - Romine KA, Rothschild JG, Hansen RC. Cicatricial alopecia and keratosis pilaris. *Keratosis follicularis spinulosa decalvans.* *Arch Dermatol.*1997;133:381.
 - Bellet JS, Kaplan AL, Selim MA, et al: Keratosis follicularis spinulosa decalvans in a family. *J Am Acad Dermatol.* 2008;58:499-502.
 - Van Osch LD, Oranje AP, Keukens FM, PC van Voorst Vader, Veldman E. Keratosis follicularis spinulosa decalvans: a family study of seven male cases and six female carriers. *J Med Genet.*1992;29:36-40.
 - Britton H, Lustig J, Thompson BJ, Meyer S, Esterly NB. Keratosis follicularis spinulosa decalvans. An infant with failure to thrive, deafness, and recurrent infections. *Arch Dermatol.*1978;114:761-4.
 - Garman ME, Nunez-Gussman J, Metry D. What syndrome is this? *Pediatr Dermatol.* 2005;22:170-4.
 - Grosshans E, Heid E, Stoll C. Keratosis follicularis spinulosa decalvans y amino-aciduria. *Ann Dermatol Venereol.*1978;105:433-8.
 - Yang CC, Hsu MM, Chen W: Folliculitis decalvans associated with micronychias. *Dermatology* 2004;208:227-228.
 - Janjua SA, Iftikhar N, Pastar Z, Hosler GA. Keratosis follicularis spinulosa decalvans associated with acne keloidalis nuchae and tufted hair folliculitis, *Am J Clin Dermatol.*2008;9:137-40.
 - Montesu MA, Castori M, Masala MV, Lissia A, Cottoni F. Palmoplantar keratoderma in keratosis follicularis spinulosa decalvans. *Eur J Dermatol.* 2010;20:850-852.
 - Maheswari UG, Chaitra V, Mohan SS. Keratosis follicularis spinulosa decalvans: A rare cause of scarring alopecia in two young Indian girls. *Int J Trichology.*2013;5:29-31.
 - Chauhan RK, Sankhwar S, Tripathi R, Pandey SS. A rare presentation of keratosis follicularis spinulosa decalvans in female twins. *Indian J Dermatol Venereol. Leprol* 0;0:0. Received: July, 2016. Accepted: February, 2017.
 - Lacarrubba F, Dall'Oglio F, Rossi A, Schwartz RA, Micali G. Familial queratosis follicularis spinulosa decalvans associated with Woolly hair. *Int J Dermatol.*2007;46:840-3.
 - Bolduc C. Sperling LC, Shapiro J. Primary cicatricial alopecia. Other lymphocytic primary cicatricial alopecias and neutrophilic and mixed primary cicatricial alopecias. *J Am Acad Dermatol.*2016;75:1101-17.
 - Bernárdez C, Molina-Ruiz AM, Requena L. Histopatología de las alopecias. Parte II. Alopecias

- cicatriciales. *Actas Dermosifiliogr.* 2015;106:260-70.
- Di Lerna V, Ricci C. Folliculitis spinulosa decalvans: an uncommon entity within the keratosis pilaris atrophicans spectrum. *Pediatr Dermatol.* 2006;23:255-8.
 - Alfadley A, Al-Hawsawi K, Hainau B et al. Two brothers with keratosis follicularis spinulosa decalvans. *J Am Acad Dermatol.* 2002;47:S275-8.
 - Malvankar DD, Sacchidanand S. Keratosis follicularis spinulosa decalvans: A report of three cases. *Int J Trichology.* 2015;7:125-8.
 - Doche I, Hordinsky M, Wilcox GL, Neusa S, Valente NS, Romiti R. Substance P in Keratosis follicular spinulosa decalvans. *J Am Acad Dermatol.* 2015;1:327-328.
 - Kunte C, Loeser C, Wolff H. Folliculitis spinulosa decalvans: successful therapy with dapsone. *J Am Acad Dermatol.* 1998;39:891-3.
 - Puppini D, Aractingi S, Dubertret L et al. Keratosis follicularis spinulosa decalvans: report of a case with ultrastructural study and unsuccessful trial of retinoids. *Dermatology.* 1992;184:133-6.
 - Hallai N, Thompson I, Williams P, et al. Folliculitis spinulosa decalvans: failure to respond to oral isotretinoin. *J Eur Acad Dermatol Venereol.* 2006;20:223-4.
 - Sanke S, mendiratta V, Singh, Chander R. Keratosis follicular spinulosa decalvans with associated mental retardation: response to isotretinoin. *Int J Trichology.* 2017;9:138-9.
 - Chui CT, Berger TG, Price VH, et al. Recalcitrant sparring follicular disorders treated by laser-assisted hair removal: a preliminary report. *Dermatol Surg.* 1999;25:34-37.
 - Moises-Alfaro C, Berrón-Pérez R, Carrasco-Daza D, Gutiérrez-Castrellón P, Ruiz-Maldonado R. Discoid lupus erythematosus in children: Clinical, histopathologic, and follow-up features in 27 cases. *Pediatr Dermatol.* 2003;20:103-107.
 - Trüeb MB. Involvement of scalp and nails in lupus erythematosus. *Lupus.* 2010;19:1078-86.
 - Sperling LC, Cowper SE, Knopp ES. Chronic cutaneous lupus erythematosus (discoid lupus erythematosus). En: Sperling LC, editor. *An atlas of hair pathology with clinical correlations.* 2nd ed. London: Informa Healthcare; 2012. pp.158-165.
 - Hordinsky M. Cicatricial alopecia: Discoid lupus erythematosus. *Dermatol Ther.* 2008;21:245-248.
 - Fabbri P, Amato L, Chiarini C, Moretti S, Massi D. Scarring alopecia in discoid lupus erythematosus: A clinical, histopathologic and immunopathologic study. *Lupus.* 2004;13:455-462.
 - Gronhagen CM, Fored CM, Granath F, Nyberg F. Cutaneous lupus erythematosus and the association with systemic lupus erythematosus: A population-based cohort of 1088 patients in Sweden. *Br J Dermatol.* 2011;164: 1335-41.
 - Abal-Díaz L, Soria X, Cassanova-Seuma JM. Alopecias cicatriciales. *ctas Dermosifiliogr.* 2012;103:376-87.
 - Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia: Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. *J Am Acad Dermatol.* 2016;75:1081-99.
 - Ross EK, Tan E, Shapiro J: Update on primary cicatricial alopecias. *J Am Acad Dermatol.* 2005; 53: 1-37.
 - Avilés Izquierdo JA, Cano Martínez N, Lázaro Ochaíta P. Epidemiological characteristics of patients with cutaneous lupus erythematosus. *Actas Dermosifiliogr.* 2014;105:69-73.
 - Moises-Alfaro C, Berrón-Pérez R, Carrasco-Daza D, Gutiérrez-Castrellón P, Ruiz-Maldonado R. Discoid lupus erythematosus in children: Clinical, histopathologic, and follow-up features in 27 cases. *Pediatr Dermatol.* 2003;20:103-107.
 - Trüeb MB. Involvement of scalp and nails in lupus erythematosus. *Lupus.* 2010;19:1078-86.
 - Sperling LC, Cowper SE, Knopp ES. Chronic cutaneous lupus erythematosus (discoid lupus erythematosus). En: Sperling LC, editor. *An atlas of hair pathology with clinical correlations.* 2nd ed. London: Informa Healthcare; 2012. pp.158-165.
 - Hordinsky M. Cicatricial alopecia: Discoid lupus erythematosus. *Dermatol Ther.* 2008;21:245-248.
 - Fabbri P, Amato L, Chiarini C, Moretti S, Massi D. Scarring alopecia in discoid lupus erythematosus: A clinical, histopathologic and immunopathologic study. *Lupus.* 2004;13:455-462.
 - Gronhagen CM, Fored CM, Granath F, Nyberg F. Cutaneous lupus erythematosus and the association with systemic lupus erythematosus: A population-based cohort of 1088 patients in

Sweden. Br J Dermatol.2011;164: 1335-41.

- Abal-Díaz L, Soria X, Cassanova-Seuma JM. Alopecias cicatriciales. Actas Dermosifiliog.2012;103:376-87.
- Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia:Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little síndrome. J Am Acad Dermatol. 2016;75:1081-99.
- Ross EK, Tan E, Shapiro J: Update on primary cicatricial alopecias. J Am Acad Dermatol.2005; 53: 1-37.
- Avilés Izquierdo JA, Cano Martínez N, Lázaro Ochaita P. Epidemiological characteristics of patients with cutaneous lupus erythematosus. Actas Dermosifiliogr. 2014;105:69-73.

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	A. CICATRICIALES 1ªS NEUTROFÍLICAS, MIXTAS. A. CICATRICIALES 2ªS. INVESTIGACIÓN, NUEVOS TRATAMIENTOS	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	4	
Modalidad (elegir una opción)		Presencial
		Semipresencial
	x	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español/Inglés	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	40
Número de horas de trabajo personal del estudiante	60
Total horas	100

CONTENIDOS (Temario)

Alopecias cicatriciales primarias neutrofílicas y mixtas. Alopecias cicatriciales secundarias.

- Alopecias cicatriciales primarias neutrofílicas.
- Cicatricial alopecias in V y VI phototypes.
- Alopecias cicatriciales mixtas.
- Alopecias cicatriciales secundarias.
- Algoritmo resumen de alopecias cicatriciales: LPP, AFF, LD.

Investigación en tricología y nuevos tratamientos

- Elaboración de un estudio científico en tricología. Metodología, criterios de evaluación y publicación. Estado actual del láser de baja potencia en la alopecia.
- Tratamiento de la alopecia con plasma rico en plaquetas. Definición, clasificación y evidencia científica.
- Células madre y regeneración folicular. Actualidad y perspectivas futuras.
- Células madre en alopecia androgénica.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Sergio Vañó-Galván, Ana Rita Rodrigues-Barata, Marta Urech, Natalia Jiménez-Gómez, David Saceda-Corralo, John Paoli, Jesús Cuevas, Pedro Jaén. Depression of the frontal veins: A new clinical sign of frontal fibrosing alopecia. J Am Acad Dermatol, Vol. 72, Issue 6, p1087–1088
- Sergio Vañó-Galván, Ana M. Molina-Ruiz, Cristina Serrano-Falcón, Salvador Arias-Santiago, Ana R. Rodrigues-Barata, Gloria Garnacho-Saucedo, Antonio Martorell-Calatayud, Pablo Fernández-Crehuet, and others . Frontal fibrosing alopecia: A multicenter review of 355 patients . J Am Acad Dermatol, Vol. 70, Issue 4, p670–678

- Moreno-Ramirez D, Camacho Martinez F. Frontal fibrosing alopecia: a survey in 16 patients. *J Eur Acad Dermatol Venereol.* 2005;19:700-705.
- Vano-Galvan S, Rodrigues-Barata AR, Urech M, et al. Depression of the frontal veins: a new clinical sign of frontal fibrosing alopecia. *J Am Acad Dermatol.* 2015;72:1087-1088.
- Paradi Mirmirani, Bree Zimmerman *J Am Acad Dermatol*, Vol. 75, Issue 2, e63–e64
- Rudnicka, Malgorzata Olszewska, Adriana Rakowska. Springer-Verlag. Atlas of Trichoscopy. Lidia London 2012.
- Pablo Fernández-Crehuet, Ana Rita Rodrigues-Barata, Sergio Vañó-Galván, Cristina Serrano-Falcón, Ana Maria Molina-Ruiz, Salvador Arias-Santiago, Antonio Martorell-Calatayud, Ramón Grimalt, and others. Trichoscopic features of frontal fibrosing alopecia: Results in 249 patients. *J Am Acad Dermatol*, Vol. 72, Issue 2, p357–359
- Athanassios Kolivras, Nathaniel Thompson, Curtis Thompson. Loss of cytokeratin-15 (CK15) expression is not specific for lichen planopilaris (LPP). *J Am Acad Dermatol*, Vol. 75, Issue 2, p428–429
- Derek V. Chan, Joseph Flynn, Rebecca Ziegler, Henry K. Wong. HLA-DR1 in familial frontal fibrosing alopecia. *J Am Acad Dermatol*, Vol. 73, Issue 1, e39
- Sergio Vañó-Galván, Ana M. Molina-Ruiz, Cristina Serrano-Falcón, Salvador Arias-Santiago, Ana R. Rodrigues-Barata, Gloria Garnacho-Saucedo, Antonio Martorell-Calatayud, Pablo Fernández-Crehuet, and others. Frontal fibrosing alopecia: A multicenter review of 355 patients. *J Am Acad Dermatol*, Vol. 70, Issue 4, p670–678
- Natasha Atanaskova Mesinkovska, Alejandra Tellez, Danyelle Dawes, Melissa Piliang, Wilma Bergfeld. The use of oral pioglitazone in the treatment of lichen planopilaris. *J Am Acad Dermatol*, Vol. 72, Issue 2, p355–356
- Melissa J. Danesh, Jenny E. Murase. Further research needed if finasteride is to become standard of care for frontal fibrosing alopecia (FFA). *J Am Acad Dermatol*, Vol. 74, Issue 4, e75.
- Christos Tziotzios, David A. Fenton, Catherine M. Stefanato, John A. McGrath. Finasteride is of uncertain utility in treating frontal fibrosing alopecia. *J Am Acad Dermatol*, Vol. 74, Issue 4, e73–e74
- Barry Ladizinski, Andrea Bazakas, M. Angelica Selim, Elise A. Olsen. *J Am Acad Dermatology*, Vol. 68, Issue 5, p749–755
- Pai VV, Kikkeri NN, Sori T, Dinesh U S. Graham-Little Piccardi Lassueur syndrome: An unusual variant of follicular lichen planus. *Int J Trichol* 2011;3:28-30
- Steglich, Raquel Bissacotti, Tonoli, Renata Elise, Pinto, Giselle Martins, Müller, Fernanda Melo, Guarenti, Isabelle Maffei, & Duvelius, Ernani Siegmann. (2012). Graham-Little Piccardi Lassueur Syndrome: case report. *Anais Brasileiros de Dermatologia*, 87(5), 775-777.
- Rawat R, Mahajan VK, Chander B, Mehta KS, Chauhan PS, Gupta M. Graham Little Piccardi Lassueur syndrome. *Our Dermatol Online.* 2016;7(1):114-116.
- MI. Fernández Canedo, P. De Unamuno Pérez, E. Fernández López, E. Blázquez Sánchez, A. Martín-Pascual. Síndrome de Graham-Little frente a liquen plano folicular Graham-Little syndrome versus follicular lichen planus. *Actas Dermosifiliogr* 2001;92:229-32 - Vol. 92 Núm.5
- Antonio JR, Lucca LCP, Borim MP, Rossi NCP, Oliveira GB. Case for diagnosis. Graham-Little-Piccardi-Lassueur Syndrome. *An Bras Dermatol.* 2014;89(6):1003-4.
- Frontal fibrosing alopecia presenting with components of Piccardi-Lasseur-Graham-Little syndrome. Abbas O, Chedraoui, Ghosn S. *J Am Acad Dermatol* 2007;57:S15-8.
- Derek V. Chan, Francisca Kartono, Rebecca Ziegler, Nebila Abdulwahab, Nicholas DiPaola, Joseph Flynn, Henry K. Wong. *J Am Acad Dermatol*, Vol. 71, Issue 5, e208–e210
- Rivas MO, Antolín SC, Sambucety PS, González ES, Ruíz de Morales JG, Prieto MR. Frontal fibrosing alopecia and lichen planopilaris in HLA-identical mother and daughter. *Indian J Dermatol Venereol Leprol* 2015;81:162-5
- Ramanauskaite A, Trüeb RM. Facial papules in fibrosing alopecia in a pattern distribution (cicatricial pattern hair loss). *Int J Trichol* 2015;7:119-22
- Hair Growth and disorders. Blume-Peytavi U., Tosti A., Whiting D., Trueb R. Springer-Verlag Berlin. 2008.
- Primary cicatricial alopecias: histopathologic findings do not distinguish clinical variants. Mirmirani P

- et al. *J Am Acad Dermatol* 2005;52:637-43.
- Dermoscopic findings in different clinical variants of lichen planus. Is dermoscopy useful? Friedman P, Sabban EC, Marcucci C, Peralta R, Cabo H. *Dermatol Pract Concept* 2015;5(4):13.
 - Primary cicatricial alopecias: clinicopathology of 112 cases. Tan E, Martinka M, Ball N, Shapiro J. *J Am Acad Dermatol* 2004;50:25-32.
 - Frontal fibrosing alopecia presenting with components of Piccardi-Lasseur-Graham-Little syndrome. Abbas O, Chedraoui, Ghosn S. *J Am Acad Dermatol* 2007;57:S15-8.
 - A histologic review of 27 patients with lichen planopilaris. Tandon Y, Somani N, Cevasco N, Bergfeld W. *J Am Acad Dermatol* 2008;59:91-8.
 - Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. Bolduc C, Sperling L, Shapiro J. *J Am Acad Dermatol* 2016;75:1081-99.
 - Arantxa Lopez-Pestaña, Anna Tuneu, Carmen Lobo, Nerea Ormaechea, José Zubizarreta, Susana Vildosola, and Elena Del Alcazar, Facial lesions in frontal fibrosing alopecia (FFA): Clinicopathological features in a series of 12 cases. *J AM ACAD DERMATOL*. n 2015
 - Abedini R, Hesari KK, Daneshpazhooh M, Ansari MS, Tohidinik HR, Ansari M. Validity of trichoscopy in the diagnosis of primary cicatricial alopecias. *Int J Dermatol* 2016;55:1106-1114.
 - Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia. Other lymphocytic primary cicatricial alopecias and neutrophilic and mixed primary cicatricial alopecias. *J Am Acad Dermatol* 2016;75:1101-17.
 - Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia. Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. *J Am Acad Dermatol* 2016;75:1081-99.
 - Suchonwanit P, Hector CE, Bin Saif GA, McMichael AJ. Factors affecting the severity of central centrifugal cicatricial alopecia. *Int J Dermatology* 2016;55: e338–e343.
 - Monteagudo B, Pérez-Valcarcel J, Mateo S, Fernández-Jorge B. Alopecia cicatricial centrífuga central. *Piel* 2016; 31:149-51.
 - Kolivras A, Thompson C. Primary scalp alopecia: new histopathological tools, new concepts and a practical guide to diagnosis. *J Cutan Pathol* 2017;44:53–69
 - Jeff C. Donovan. Finasteride-mediated hair regrowth and reversal of atrophy in a patient with frontal fibrosing alopecia. *JAAD Case Reports* 2015;1:353-5.
 - Bernardez C, Molina-Ruiz AM, Requena L. Histologic features of alopecias: Part II: Scarring alopecias. *Actas Dermosifiliogr*. 2014
 - Mendes-Bastos P, Camps-Fresneda A. Hair Transplantation for Frontal Fibrosing Alopecia: Part of the Solution? *Actas Dermosifiliogr*. 2015.
 - Bernárdez C, Molina-Ruiz AM, Requena L. Histopatología de las alopecias. Parte II: alopecias cicatriciales. *Actas Dermosifiliogr*. 2015;106:260-270.
 - Harries MJ, Trueb RM, Tosti A, Messenger AG, Chaudhry I, Whiting DA, Sinclair R, Griffiths CEM, Paus R. How not to get scar (r)ed: pointers to the correct diagnosis in patients with suspected primary cicatricial alopecia. *Br J Dermatol*. 2009;160:482-501.
 - Somani N, Bergfeld W F. Cicatricial alopecia: classification and histopathology. *Dermatol Ther*. 2008;21:221-237.
 - Ronglioletti F, Christana K. Cicatricial (scarring) alopecias an overview of pathogenesis, classification, diagnosis, and treatment. *Am J Clin Dermatol*. 2012;13:247-260.
 - Miteva M, Tosti A. Dermatoscopy guided scalp biopsy in cicatricial alopecia. *J EADV* 2013;27:1299-1303.
 - Ana Filipa Pedrosa, Ana Filipa Duarte, Eckart Haneke, PhD,a,d and Osvaldo Correia. Yellow facial papules associated with frontal fibrosing alopecia: A distinct histologic pattern and response to isotretinoin. *J AM ACAD DERMATOL*. OCTOBER 2017
 - Siemens HW. Keratosis follicularis spinulosa decalvans. *Arch Dermatol Syphilol*.1926;151:384-7.
 - Castori M, Covaciu C, Paradisi M, Zambruno G. Clinical and genetic heterogeneity in keratosis follicularis spinulosa decalvans. *Eur J Med Genet*.2009;52:53-8.
 - Rand R, Baden HP. Keratosis follicularis spinulosa decalvans. Report of two cases and literature

- review. *Arch Dermatol.*1983;119:22-6.
- Judge M.R., McLean W.H.I., and Munro C.S.: Disorders of keratinisation. In Burns D.A., Breathnach S.M., Cox N., and Griffith C.S. (eds): *Rook's Textbook of Dermatology*, 8th ed. Oxford: Wiley Blackwell, 2010. pp. 72-93.
 - Oosterwijk JC, Nelen M, van Zandvoort PM, van Osch LD, Oranje AP, Wittebol Post D et al. Linkage analysis of keratosis follicularis spinulosa decalvans, and regional assignment to human chromosome Xp21.2-p22.2. *Am J Hum Genet.*1992;50:801-7.
 - Oosterwijk JC, Nelen M, van Zandvoort PM et al. Confirmation of X-linked inheritance and provisional mapping of the keratosis follicularis spinulosa decalvans gene on Xp in a large Dutch family. *Ophthalmic Paediatr Genet.*1992;13:27-30.
 - Oranje AP, van Osch LD, Oosterwijk JC. Keratosis pilaris atrophicans. One heterogeneous disease or a symptom in different clinical entities? *Arch Dermatol.*1994;130:469-75.
 - Oosterwijk JC, van der Wielen MJ, van de Vosse E, Voorhoeve E, Bakker E. Refinement of the localisation of the X linked keratosis follicularis spinulosa decalvans (KFSD) gene in Xp22.13-p22.2. *J Med Genet.*1995;32:736-9.
 - Porteous ME, Strain L, Logie LJ, Herd RM, Benton EC. Keratosis follicularis spinulosa decalvans: confirmation of linkage to Xp22.13-p22.2. *J Med Genet.*1998;35:336-7.
 - Oosterwijk JC, Richard G, van der Wielen MJ, van de Vosse E, Harth W, Sandkuijl LA, et al. Molecular genetic analysis of two families with keratosis follicularis spinulosa decalvans: refinement of gene localization and evidence for genetic heterogeneity. *Hum Genet.*1997;100:520-4.
 - Aten E, Brasz LC, Bornholdt D, Hooijkaas IB, Porteous ME, Sybert VP, et al. Keratosis follicularis spinulosa decalvans is caused by mutations in MBTPS2. *Hum Mutat.* 2010;31:1125-33.
 - Fong K, Wedgeworth EK, Lai-Cheong JE, et al: MBTPS2 mutation in a British pedigree with keratosis follicularis spinulosa decalvans. *Clin Exp Dermatol.* 2012;37:631-634.
 - Khumalo NP, Loo WJ, Hollowood K, et al: Keratosis pilaris atrophicans in mother and daughter. *J Eur Acad Dermatol Venereol.* 2002;16:397-400.
 - Kuokkanen K. Keratosis follicularis spinulosa decalvans in a family from north-east Finland. *Acta Derm Venereol.* 1971;51:146-50.
 - Baden HP, Byers HR. Clinical findings, cutaneous pathology, and response to therapy in 21 patients with keratosis pilaris atrophicans. *Arch Dermatol* 1994; 130:469-75.
 - Romine KA, Rothschild JG, Hansen RC. Cicatricial alopecia and keratosis pilaris. *Keratosis follicularis spinulosa decalvans.* *Arch Dermatol.*1997;133:381.
 - Bellet JS, Kaplan AL, Selim MA, et al: Keratosis follicularis spinulosa decalvans in a family. *J Am Acad Dermatol.* 2008;58:499-502.
 - Van Osch LD, Oranje AP, Keukens FM, PC van Voorst Vader, Veldman E. Keratosis follicularis spinulosa decalvans: a family study of seven male cases and six female carriers. *J Med Genet.*1992;29:36-40.
 - Britton H, Lustig J, Thompson BJ, Meyer S, Esterly NB. Keratosis follicularis spinulosa decalvans. An infant with failure to thrive, deafness, and recurrent infections. *Arch Dermatol.*1978;114:761-4.
 - Garman ME, Nunez-Gussman J, Metry D. What syndrome is this? *Pediatr Dermatol.* 2005;22:170-4.
 - Grosshans E, Heid E, Stoll C. Keratosis follicularis spinulosa decalvans y amino-aciduria. *Ann Dermatol Venereol.*1978;105:433-8.
 - Yang CC, Hsu MM, Chen W: Folliculitis decalvans associated with micronychias. *Dermatology* 2004;208:227-228.
 - Janjua SA, Iftikhar N, Pastar Z, Hosler GA. Keratosis follicularis spinulosa decalvans associated with acne keloidalis nuchae and tufted hair folliculitis. *Am J Clin Dermatol.*2008;9:137-40.
 - Montesu MA, Castori M, Masala MV, Lissia A, Cottoni F. Palmoplantar keratoderma in keratosis follicularis spinulosa decalvans. *Eur J Dermatol.* 2010;20:850-852.
 - Maheswari UG, Chaitra V, Mohan SS. Keratosis follicularis spinulosa decalvans: A rare cause of scarring alopecia in two young Indian girls. *Int J Trichology.*2013;5:29-31.
 - Chauhan RK, Sankhwar S, Tripathi R, Pandey SS. A rare presentation of keratosis follicularis spinulosa decalvans in female twins. *Indian J Dermatol Venereol.* Leprol 0;0:0. Received: July, 2016. Accepted: February, 2017.

- Lacarrubba F, Dall'Oglio F, Rossi A, Schwartz RA, Micali G. Familial keratosis follicularis spinulosa decalvans associated with Woolly hair. *Int J Dermatol.*2007;46:840-3.
- Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia. Other lymphocytic primary cicatricial alopecias and neutrophilic and mixed primary cicatricial alopecias. *J Am Acad Dermatol.*2016;75:1101-17.
- Bernárdez C, Molina-Ruiz AM, Requena L. Histopatología de las alopecias. Parte II. Alopecias cicatriciales. *Actas Dermosifiliogr.*2015;106:260-70.
- Di Lernia V, Ricci C. Folliculitis spinulosa decalvans: an uncommon entity within the keratosis pilaris atrophicans spectrum. *Pediatr Dermatol.*2006;23:255-8.
- Alfadley A, Al-Hawsawi K, Hainau B et al. Two brothers with keratosis follicularis spinulosa decalvans. *J Am Acad Dermatol.* 2002;47:S275-8.
- Malvankar DD, Sacchidanand S. Keratosis follicularis spinulosa decalvans: A report of three cases. *Int J Trichology.* 2015;7:125-8.
- Doche I, Hordinsky M, Wilcox GL, Neusa S, Valente NS, Romiti R. Substance P in Keratosis follicularis spinulosa decalvans. *J Am Acad Dermatol.*2015;1:327-328.
- Kunte C, Loeser C, Wolff H. Folliculitis spinulosa decalvans: successful therapy with dapsone. *J Am Acad Dermatol.*1998;39:891-3.
- Puppini D, Aractingi S, Dubertret L et al. Keratosis follicularis spinulosa decalvans: report of a case with ultrastructural study and unsuccessful trial of retinoids. *Dermatology.*1992;184:133-6.
- Hallai N, Thompson I, Williams P, et al. Folliculitis spinulosa decalvans: failure to respond to oral isotretinoin. *J Eur Acad Dermatol Venereol.* 2006;20:223-4.
- Sanke S, mendiratta V, Singh, Chander R. Keratosis follicularis spinulosa decalvans with associated mental retardation: response to isotretinoin. *Int J Trichology.* 2017;9:138-9.
- Chui CT, Berger TG, Price VH, et al. Recalcitrant sparring follicular disorders treated by laser-assisted hair removal: a preliminary report. *Dermatol Surg.*1999;25:34-37.
- Moises-Alfaro C, Berrón-Pérez R, Carrasco-Daza D, Gutiérrez-Castrellón P, Ruiz-Maldonado R. Discoid lupus erythematosus in children: Clinical, histopathologic, and follow-up features in 27 cases. *Pediatr Dermatol.*2003;20:103-107.
- Trüeb MB. Involvement of scalp and nails in lupus erythematosus. *Lupus.*2010;19:1078-86.
- Sperling LC, Cowper SE, Knopp ES. Chronic cutaneous lupus erythematosus (discoid lupus erythematosus). En: Sperling LC, editor. *An atlas of hair pathology with clinical correlations.* 2nd ed. London: Informa Healthcare; 2012. pp.158-165.
- Hordinsky M. Cicatricial alopecia: Discoid lupus erythematosus. *Dermatol Ther.*2008;21:245-248.
- Fabbri P, Amato L, Chiarini C, Moretti S, Massi D. Scarring alopecia in discoid lupus erythematosus: A clinical, histopathologic and immunopathologic study. *Lupus.* 2004;13:455-462.
- Gronhagen CM, Fored CM, Granath F, Nyberg F. Cutaneous lupus erythematosus and the association with systemic lupus erythematosus: A population-based cohort of 1088 patients in Sweden. *Br J Dermatol.*2011;164: 1335-41.
- Abal-Díaz L, Soria X, Cassanova-Seuma JM. Alopecias cicatriciales. *Actas Dermosifiliogr.*2012;103:376-87.
- Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia: Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. *J Am Acad Dermatol.* 2016;75:1081-99.
- Ross EK, Tan E, Shapiro J: Update on primary cicatricial alopecias. *J Am Acad Dermatol.*2005; 53: 1-37.
- Avilés Izquierdo JA, Cano Martínez N, Lázaro Ochaíta P. Epidemiological characteristics of patients with cutaneous lupus erythematosus. *Actas Dermosifiliogr.* 2014;105:69-73.
- Moises-Alfaro C, Berrón-Pérez R, Carrasco-Daza D, Gutiérrez-Castrellón P, Ruiz-Maldonado R. Discoid lupus erythematosus in children: Clinical, histopathologic, and follow-up features in 27 cases. *Pediatr Dermatol.*2003;20:103-107.
- Trüeb MB. Involvement of scalp and nails in lupus erythematosus. *Lupus.*2010;19:1078-86.
- Sperling LC, Cowper SE, Knopp ES. Chronic cutaneous lupus erythematosus (discoid lupus erythematosus). En: Sperling LC, editor. *An atlas of hair pathology with clinical correlations.* 2nd ed.

London: Informa Healthcare; 2012. pp.158-165.

- Hordinsky M. Cicatricial alopecia: Discoid lupus erythematosus. *Dermatol Ther.*2008;21:245-248.
- Fabbri P, Amato L, Chiarini C, Moretti S, Massi D. Scarring alopecia in discoid lupus erythematosus: A clinical, histopathologic and immunopathologic study. *Lupus.* 2004;13:455-462.
- Gronhagen CM, Fored CM, Granath F, Nyberg F. Cutaneous lupus erythematosus and the association with systemic lupus erythematosus: A population-based cohort of 1088 patients in Sweden. *Br J Dermatol.*2011;164: 1335-41.
- Abal-Díaz L, Soria X, Cassanova-Seuma JM. Alopecias cicatriciales. *Actas Dermosifiliogr.*2012;103:376-87.
- Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia: Lymphocytic primary cicatricial alopecias, including chronic cutaneous lupus erythematosus, lichen planopilaris, frontal fibrosing alopecia, and Graham-Little syndrome. *J Am Acad Dermatol.* 2016;75:1081-99.
- Ross EK, Tan E, Shapiro J: Update on primary cicatricial alopecias. *J Am Acad Dermatol.*2005; 53: 1-37.
- Avilés Izquierdo JA, Cano Martínez N, Lázaro Ochaita P. Epidemiological characteristics of patients with cutaneous lupus erythematosus. *Actas Dermosifiliogr.* 2014;105:69-73.
- Jahns AC, Lundskog B, Nosek D, Killasli H, Emtestam L, Alexeyev, Microbiology of folliculitis decalvans: a histological study of 37 patients. *J Eur Acad Dermatol Venereol.* 2015 May;29(5):1025-6.
- Brooke RCC, Griffiths CEM. Folliculitis decalvans. *Clinical and experimental dermatol* 2001; 26: 120-122.
- J. Powell, R.P.R. Dawber. Folliculitis decalvans including tufted folliculitis: clinical, histological and therapeutic findings. *British J Dermatol* 1999; 140: 328-333
- J. Powell, R.P.R. Dawber. Successful treatment regime for folliculitis decalvans despite uncertainty of all aetiological factors. *British J Dermatol* 2001; 144: 428-429
- Gemmeke A, Wollina U. Folliculitis decalvans of the scalp: response to triple therapy with isotretinoin, clindamycin, and prednisolone. *Acta Dermatovenerol Alp Pannonica Adriat.* 2006 Dec;15(4):184-6.
- Douwes KE1, Landthaler M, Szeimies RM. Simultaneous occurrence of folliculitis decalvans capillitii in identical twins. *Br J Dermatol.* 2000 Jul;143(1):195-7.
- Tietze JK1, Hept MV1, von Preußen A1, Wolf U1, Ruzicka T1, Wolff H1, Sattler EC1.
- Oral isotretinoin as the most effective treatment in folliculitis decalvans: a retrospective comparison of different treatment regimens in 28 patients. *J Eur Acad Dermatol Venereol.* 2015 Sep;29(9):1816-21.
- Mihaljević N, von den Driesch P. Successful use of infliximab in a patient with recalcitrant folliculitis decalvans. *J Dtsch Dermatol Ges.* 2012 Aug;10(8):589-90.
- Kreutzer K, Effendy I. Therapy-resistant folliculitis decalvans and lichen planopilaris successfully treated with adalimumab. *J Dtsch Dermatol Ges.* 2014 Jan;12(1):74-6.
- Ismail N1, Ralph N1, Murphy G1. Intravenous human immunoglobulin for treatment of folliculitis decalvans. *J Dermatolog Treat.* 2015 Oct;26(5):471-2.
- Meesters AA, Van der Veen JP, Wolkerstorfer A. Long-term remission of folliculitis decalvans after treatment with the long-pulsed Nd:YAG laser. *J Dermatolog Treat.* 2014 Apr;25(2):167-8.
- Parlette EC, Kroeger N, Ross EV. Nd:YAG laser treatment of recalcitrant folliculitis decalvans *Dermatol Surg.* 2004 Aug;30(8):1152-4.
- Miguel-Gomez L, Vano-Galvan S, Perez-Garcia B, Carrillo-Gijon R, Jaen-Olasolo P. Treatment of folliculitis decalvans with photodynamic therapy: Results in 10 patients. *J Am Acad Dermatol.* 2015 Jun;72(6):1085-7.
- Otberg N, Wu WY, Kang H, Martinka M, Alzolibani AA, Restrepo I, Shapiro J. Folliculitis decalvans developing 20 years after hair restoration surgery in punch grafts: case report. *Dermatol Surg.* 2009 Nov;35(11):1852-6
- Scheinfeld N. Dissecting cellulitis (Perifolliculitis Capitis Abscedens et Suffodiens): a comprehensive review focusing on new treatments and findings of the last decade with commentary comparing the therapies and causes of dissecting cellulitis to hidradenitis suppurativa. *Dermatol Online J.* 2014 May

16;20(5):22692.

- Badaoui A, Reygagne P, Cavelier-Balloy B, Pinquier L, Deschamps L, Crickx B, Descamps V. Dissecting cellulitis of the scalp: a retrospective study of 51 patients and review of literature. *Br J Dermatol*. 2015 Jul 2.
- Miteva M, Tosti A. Hair and scalp dermatoscopy. *J Am Acad Dermatol*. 2012. Nov;67(5):1040-8.
- Yin NC, Tosti A. A systematic approach to Afro-textured hair disorders: dermatoscopy and when to biopsy. *Dermatol Clin*. 2014 Apr;32(2):145-51
- Abraham LS, Piñeiro-Maceira J, Duque-Estrada B, Barcaui CB, Sodr  CT. Pinpointwhite dots in the scalp: dermoscopic and histopathologic correlation. *J Am Acad Dermatol*. 2010 Oct;63(4):721-2.
- Ardig  M, Torres F, Abraham LS, Piñeiro-Maceira J, Cameli N, Berardesca E, Tosti A. Reflectance confocal microscopy can differentiate dermoscopic white dots of the scalp between sweat gland ducts or follicular infundibulum. *Br J Dermatol*. 2011 May;164(5):1122-4.
- Khumalo S et al. Marginal traction alopecia severity score: development and test reliability. *J Cosmet Dermatol* 2007;6:262-269.
- Yin NC, Tosti A. A systematic approach to Afro-textured hair disorders: dermatoscopy and when to biopsy. *Dermatol Clin*. 2014 Apr;32(2):145-51.
- Tosti A, Miteva M, Torres F, Vincenzi C, Romanelli P. Hair casts are a dermoscopic clue for the diagnosis of traction alopecia. *Br J Dermatol*. 2010 Dec;163(6):1353-5
- Miteva M, Tosti A. Dermoscopic features of central centrifugal cicatricial alopecia. *J Am Acad Dermatol*. 2014 Sep;71(3):443-9.
- Olsen et al Central scalp alopecia photographic scale in African American women. *Dermatol Ther* 2008;21, 264-267.
- Olsen, et al. Central hair loss in African American women: incidence and potential risk factors. *J Am Acad Dermatol*. 2011;64(2):245-252.
- Tosti A, Torres F, Miteva M. Dermoscopy of Early Dissecting Cellulitis of the Scalp Simulates Alopecia Areata. *Actas Dermosifiliogr*. 2012 Jul 30
- Duque-Estrada B, Tamler C, Sodr  CT, Barcaui CB, Pereira FB. Dermoscopy patterns of cicatricial alopecia resulting from discoid lupus erythematosus and lichen planopilaris. *An Bras Dermatol*. 2010 Mar-Apr;85(2):179-83.
- Miteva M, Whiting D, Harries M, Bernardes A, Tosti A. Frontal fibrosing alopecia in black patients. *Br J Dermatol*. 2012 Jul;167(1):208-10
- Lacarrubba F, Micali G, Tosti A. Absence of vellus hair in the hairline: a videodermoscopic feature of frontal fibrosing alopecia. *Br J Dermatol*. 2013 Aug;169(2):473-4
- Dlova NC. Frontal fibrosing alopecia and lichen planus pigmentosus: is there a link? *Br J Dermatol*. 2013 Feb;168(2):439-42
- Lanuti E, Miteva M, Romanelli P, Tosti A. Trichoscopy and histopathology of follicular keratotic plugs in scalp discoid lupus erythematosus. *Int J Trichology*. 2012 Jan;4(1):36-8.
- Fern ndez-Pugnaire MA, Arias-Santiago S, Dulanto-Campos C. Erosive pustular dermatosis of the scalp. *Rev Esp Geriatr Gerontol*. 2010;45(2):118-119.
- Roche-Kubler B, Monnin C, Aubin F, Dupond AS. Erosive pustular dermatosis of the scalp and thigh associated with skin graft recipient and donor sites. *Eur J Dermatol*. 2015;25(3):269-271.
- Ross EK, Tan E, Shapiro J. Update on primary cicatricial alopecias. *J Am Acad Dermatol*. 2005;53:1-37.
- Abal-D az L, Soria X, Casanova-Seuma JM. Alopecias cicatriciales. *Actas Dermosifiliograf*. 2012;103:376-387.
- Di Lernia V, Ricci C. Familial erosive pustular dermatosis of the scalp and legs successfully treated with ciclosporin. *Clin Exp Dermatol*. 2016;41(3):334-335.
- Bern rdez C, Molina-Ruiz AM, Requena L. Histopatolog a de las alopecias. Parte II: alopecias cicatriciales. *Actas Dermosifiliograf*. 2015;106:260-270.
- Aigner B, Legat FJ, Schuster C, El Shabrawi-Caelen L. Sun-induced pustular dermatosis of the scalp- a new variant of erosive pustular dermatosis of the scalp?. *Acta Derm Venereol*. 2014;94(4):457-458.
- Rongioletti F, Chinazzo C, Javor S. Erosive pustular dermatosis of the scalp induced by ingenol mebutate. *J Eur Acad Dermatol Venereol*. 2016;30(11):e110-e111. doi: 10.1111/jdv.13350.

- López V, López I, Ramos V, Ricart JM. Erosive pustular dermatosis of the scalp after photodynamic therapy. *Dermatol Online J.* 2012;18(9):13.
- Marzano AV, Ghislanzoni M, Zaghis A, Spinelli D, Crosti C. Localized erosive pustular dermatosis of the scalp at the site of a cochlear implant: successful treatment with topical tacrolimus. *Clin Exp Dermatol.* 2009;34(5):157-159.
- Shahmoradi Z, Abtahi-Naeini B, Pourazizi M. Erosive pustular dermatosis of the scalp following hair transplantation. *Adv Biomed Res.* 2014;22;3:176. doi: 10.4103/2277-9175.
- Pagliarello C, Fabrizi G, Fantini C, Cortelazzi C, Boccaletti V, Annessi G, Zampetti A, Feliciani C, Di Nuzzo S. Calcipotriol/betametasona dipropionate ointment compared with tacrolimus ointment for the treatment of erosive pustular dermatosis of the scalp: a split-lesion comparison. *Eur J Dermatol.* 2015;25(2):206-208.
- Meyer T, López-Navarro N, Herrera Acosta E et al. Erosive pustular dermatosis of the scalp: a successful treatment with photodynamic therapy. *Photodermatol Photoimmunol Photomed.* 2010;26:44-45.
- Yang CS, Kuhn H, Cohen LM, Kroumpouzou G. Aminolevulinic acid photodynamic therapy in the treatment of erosive pustular dermatosis of the scalp: a case series. *JAMA Dermatol.* 2016;152(6):694-697.
- Broussard KC, Berger TG, Rosenblum M, Murase JE. Erosive pustular dermatosis of the scalp: a review with a focus on dapsone therapy. *J Am Acad Dermatol.* 2012;66(4):680-686.
- C. Pernet, D. Bessis, O. Dereure and N. Raison-Peyron. Erosive pustular dermatosis of the scalp developing after a burn from a hair-bleaching procedure. *Clinical and Experimental Dermatology.* 2017; 42:233–234.
- Jay S. Herbst and Alexander T. Herbst. Erosive pustular dermatosis of the scalp after contact dermatitis from a prosthetic hair piece. *J Am Acad Dermatol Case Reports.* 2017;3:121-3.
- Michela Starace, Camilla Loi, Francesca Bruni, Aurora Alessandrini, Cosimo Misciali, Annalisa Patrizi, and Bianca Maria Piraccini. Erosive pustular dermatosis of the scalp: Clinical, trichoscopic, and histopathologic features of 20 cases. *J Am Acad Dermatol.* 2017;76:1109-1114.
- Tomohisa Fukui, Hideo Kitamura, Ken Harada, Hajime Nakano, Daisuke Sawamura . Trichoscopic Findings of Erosive Pustular Dermatitis of the Scalp Associated with Gefitinib. *Case Rep Dermatol.* 2017;9:44–49.
- Sperling LC, Homoky C, Pratt L et al. Acne keloidalis is a form of primary scarring alopecia. *Arch Dermatol.* 2000;136:479-484.
- Shapero J, Shapero H. Acne keloidalis nuchae is scar and keloid formation secondary to mechanically induced folliculitis. *J Cutan med Surg.* 2011;15:238-240.
- Kelly AP. Pseudofolliculitis barbae and acne keloidalis nuchae. *Dermatol Clin.* 2003;21(4):645-653.
- Verma SB, Wollina U. Acne keloidalis nuchae: another cutaneous symptom of metabolic syndrome, truncal obesity, and impending/overt diabetes mellitus?. *Am J Clin Dermatol.* 2010;11:433-436.
- Bajaj V, Langtry JA. Surgical excision of acne keloidalis nuchae with secondary intention healing. *Clin Exp Dermatol.* 2008;33:53-55.
- Bajaj V, Langtry JA. Surgical excision of acne keloidalis nuchae with secondary intention healing. *Clin Exp Dermatol.* 2008;33:53-55.
- Okoye GA, Rainer BM, Leung SG et al. Improving acne keloidalis nuchae with targeted ultraviolet B treatment: a prospective, randomized, split-scalp comparison study. *Br J Dermatol.* 2014;171:1156-1163.
- Esmat SM, Abdel Hay RM, Abu Zeid OM et al. The efficacy of laser-assisted hair removal in the treatment of acne keloidalis nuchae; a pilot study. *Eur J Dermatol.* 2012;22:645-650.
- Maranda EL, Simmons BJ, Nguyen AH, Lim VM, Keri JE. Treatment of acne keloidalis nuchae: a systematic review of the literature. *Dermatol Ther (Heidelb).* 2016;6(3):363-378.
- Ogunbiyi A. Acne keloidalis nuchae: prevalence, impact, and management challenges. *Clin Cosmet Investig Dermatol* 2016;9:483-489.
- Chouk C, Litaïem N, Jones M, Zeglouï F. Acne Keloidalis nuchae: clinical and dermoscopic features. *BMJ.* 2017. 23; pii: bcr-2017-222222. doi: 10.1136/bcr-2017-222222
- Woo DK, Treyger G, Henderson M, Huggins RH, Jackson-Richards D, Hamzavi I. Keloidalis nuchae

- with a long-pulsed Neodymium-Doped Yttrium-Aluminum-Garnet laser. Prospective Controlled Trial for the treatment of acne. *J Cutan Med Surg*. 2018;22(2):236-238.
- Tawfik A, Osman MA, Rashwan I. A novel treatment of acne keloidalis nuchae by long-pulsed alexandrite laser. *Dermatol Surg*. 2018;44(3):413-430.
 - Zirn JR, Scott RA, Hambrick GW. Chronic acneiform eruption with crateriform scars. Acne necrotica (varioliiformis) (necrotizing lymphocytic folliculitis). *Arch Dermatol*. 1996;132:1367-1370.
 - González Castro U, Shanova-Ivanova L, Trías Puig-Sureda I, Español Quintilla I, Pedragosa Jové R. Acné necrótico (varioliiforme). *Actas Dermosifiliograf*. 2001;92:452-455.
 - Maibach HL. Acne necroticans (varioliiformis) versus Propionibacterium acnes folliculitis. *J Am Acad Dermatol*. 1989;21:323.
 - Fisher DA. Acne necroticans (varioliiformis) and Staphylococcus aureus. *J Am Acad Dermatol*. 1988;18:1136-1138.
 - Hunter GA. Acne necrotica due to phenylbutazone. *Br Med J*. 1959;1(5114):113.
 - Bolduc C, Sperling LC, Shapiro J. Primary cicatricial alopecia: Other lymphocytic primary cicatricial alopecias and neutrophilic and mixed primary cicatricial alopecias. *J Am Acad Dermatol*. 2016;75(6):1101-1117.
 - Pitney LK, O'Brien B, Pitney MJ. Acne necrotica (necrotizing lymphocytic folliculitis): An enigmatic and under-recognised dermatosis. *Australas J Dermatol*. 2018;59(1):e53-e58. doi: 10.1111/ajd.12592. Epub 2017 Feb 27.
 - Sharquie KE1, Al-Rawi JR, Al-Janabi HA. Frictional hair loss in Iraqi patients. *J Dermatol*. 2002;29:419-22
 - Hwang SM, Lee WS, Choi EH, Lee SH, Ahn SK. Nurse's cap alopecia. *Int J Dermatol*. 1999;38:187-91
 - Z. Ézsöl-Lendvai, L. Iñiguez-de Onzoño y L. Pérez-García. Placas alopécicas en una cocinera. *Actas Dermosifiliogr*. In press-noviembre 2015
 - Camacho-Martinez, Tosti A. Montagna. *Tricología. Enfermedades del folículo pilosebáceo. Tercera edición*
 - Nnoruka EN1, Obiagboso I, Maduechesi C. Hair loss in children in South-East Nigeria: common and uncommon cases. *Int J Dermatol*. 2007;46:18-22
 - Singal A, Dhaliwal U, Bhattacharya SN, Rohatgi J, Singh N. *J Dermatol*. Complex ocular choristomas in linear nevus sebaceus syndrome: a report of two cases. 2001;28:259-64
 - Camacho-Martinez, Tosti A. Montagna. *Tricología. Enfermedades del folículo pilosebáceo. Tercera edición*
 - Lutz ME, Pittelkow MR. Progressive generalized alopecia due to systemic amyloidosis. *J Am Acad Dermatol*. 2002;46:434-6.
 - Muñoz-Pérez MA, Camacho F. Lichen planopilaris and scleroderma en coup de sabre. *J Eur Acad Dermatol Venereol*. 2002;16:542-4.
 - Yamamoto T, Yokozeki H. Scalp sarcoidosis mimicking organoid nevus. *Eur J Dermatol*. 2015;25:78-9.
 - Shaffrali FC, McDonagh AJ, Messenger AG. Hair darkening in porphyria cutanea tarda. *Br J Dermatol*. 2002;146:325-9.
 - Camacho-Martinez, Tosti A. Montagna. *Tricología. Enfermedades del folículo pilosebáceo. Tercera edición*
 - Lynch M, Callagy G, Mahon S, Murphy LA. Arcuate plaques of the face and scalp. Atypical necrobiosis lipoidica (ANL) of the face and scalp. *Clin Exp Dermatol*. 2010;35:799-800.
 - Kawakami Y, Oyama N, Hanami Y, Kimura T, Kishimoto K, Yamamoto T. A case of lichen sclerosis of the scalp associated with autoantibodies to extracellular matrix protein 1. *Arch Dermatol*. 2009;145:1458-60.
 - Neto Pimentel DR, Michalany N, De Abreu MA, Alchorne M. Multiple deep granuloma annulare limited to the cephalic segment in childhood. *Pediatr Dermatol*. 2008;25:407-8
 - Camacho F, García-Hernández MJ: Zinc aspartate, biotin, and clobetasol propionate in the treatment of alopecia areata in childhood *Pediatr Dermatol* 1999; 16: 336-8.
 - Conde Montero E, Fernández Santos ME, Suárez Fernández R. Platelet-rich plasma: applications in dermatology. *Actas Dermosifiliogr*. 2015 Mar;106(2):104-11.
 - Wroblewski AP, Melia HJ, Wright VJ. Application of platelet-rich plasma to enhance tissue repair.

Oper Tech Orthop 2010; 20:98–105

- Andia I, Abate M. Platelet-rich plasma: underlying biology and clinical correlates. *Regen Med.* 2013 Sep;8(5):645-58.
- Martínez JM, Cano J, Gonzalo JC, Campo J, Esparza GC, Seoane JM. ¿Existen riesgos al utilizar los concentrados de Plasma Rico en Plaquetas (PRP) de uso ambulatorio? *Medicina Oral* 2002; 7: 375-90.
- Conde Montero E, Fernández Santos ME, Suárez Fernández R. Platelet-rich plasma: applications in dermatology. *Actas Dermosifiliogr.* 2015 Mar;106(2):104-11.
- Dohan Ehrenfest DM, Rasmusson L, Albrektsson T. Classification of platelet concentrates: from pure platelet-rich plasma (P-PRP) to leucocyte- and platelet-rich fibrin (L- PRF) *Trends Biotechnol.* 2009;27:158–167
- Dohan Ehrenfest DM, Sammartino G, Shibli JA, Wang HL, Zou DR, Bernard JP. Guidelines for the publication of articles related to platelet concentrates: the international classification of the POSEIDO. *POSEIDO.* 2013;1:17–27.
- Andia I, Abate M. Platelet-rich plasma: underlying biology and clinical correlates. *Regen Med.* 2013 Sep;8(5):645-58.
- Magalon J, Bausset O, Serratrice N, Giraudou L, Aboudou H, Veran J, Magalon G, Dignat-Georges F, Sabatier F. Characterization and comparison of 5 platelet-rich plasma preparations in a single-donor model. *Arthroscopy.* 2014 May;30(5):629-38.
- Uebel CO, da Silva JB, Cantarelli D, Martins P. The role of platelet plasma growth factors in male pattern baldness surgery. *Plast Reconstr Surg.* 2006 Nov;118(6):1458-66.
- Greco J, Brandt R. The effects of autologous platelet rich plasma and various growth factors on non-transplanted miniaturized hair. *Hair Transplant Forum Int* 2009;19:49-50.
- Li ZJ, Choi HI, Choi DK, Sohn KC, Im M, Seo YJ, Lee YH, Lee JH, Lee Y. Autologous platelet-rich plasma: a potential therapeutic tool for promoting hair growth. *Dermatol Surg.* 2012 Jul;38(7 Pt 1):1040-6.
- Kang JS, Zheng Z, Choi MJ, Lee SH, Kim DY, Cho SB. The effect of CD34+cell-containing autologous platelet-rich plasma injection on pattern hair loss: a preliminary study. *J Eur Acad Dermatol Venereol.* 2014 Jan;28(1):72-9.
- Trink A, Sorbellini E, Bezzola P, Rodella L, Rezzani R, Ramot Y, Rinaldi F. A randomized, double-blind, placebo- and active-controlled, half-head study to evaluate the effects of platelet-rich plasma on alopecia areata. *Br J Dermatol.* 2013 Sep;169(3):690-4.
- Singh S. Role of platelet-rich plasma in chronic alopecia areata: Our centre experience. *Indian J Plast Surg.* 2015 Jan-Apr;48(1):57-9.
- Platelet-rich Plasma as a Potential Treatment for Non cicatricial Alopecias. Gkini Maria-Angeliki, Kouskoukis Alexandros-Efstratios, Rigopoulos Dimitris, Kouskoukis Konstantinos *Int J Trichology.* 2015 Apr-Jun; 7(2): 54–63.
- Platelet-rich Plasma as a Potential Treatment for Non cicatricial Alopecias. Gkini Maria-Angeliki, Kouskoukis Alexandros-Efstratios, Rigopoulos Dimitris, Kouskoukis Konstantinos *Int J Trichology.* 2015 Apr-Jun; 7(2): 54–63.
- Análisis estadística: SAS 9.2 (SAS Institute Inc., Cary, NC). P < 0.05: estadísticamente significativo

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	HIPERTRICOSIS E HIRSUTISMO. COSMÉTICA CAPILAR	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)	<input type="checkbox"/>	Presencial
	<input checked="" type="checkbox"/>	Semipresencial
	<input type="checkbox"/>	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

Hipertrichosis e hirsutismo. Clasificación.

- Hipertrichosis sintomáticas. Hipertrichosis congénitas generalizadas y localizadas.
- Síndrome SAHA.
- Hirsutismo ovárico.
- Hirsutismo suprarrenal e hipofisario.

Cosmética capilar: características cosméticas del cabello, cosméticos capilares, sistemas de integración capilar, prótesis capilares, microfibras, tricopigmentación. Métodos de depilación: procedimientos físicos, químicos y láser.

- Propiedades físicas tallo piloso y cosméticos capilares.
- Alteraciones en el tallo/cuero cabelludo por procedimientos o cosméticos capilares.
- Sistemas de integración capilar, prótesis capilares y microfibras.
- Micropigmentación y microblading.
- Métodos de depilación.
- Cuidados y productos de cosmética capilar.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153Wagamon K, Mirmirani P. Localized hypertrichosis in a pediatric patient – what is the mechanism for excess hair growth? Ped Dermol 2007; 34: 250–252.
- Gómez Centeno P, Rosón E, Peteiro C, et al. Rubinstein-Taybi syndrome and ulerythema ophryogenes in a 9-year-old boy. Pediatr Dermatol. 1999;16:134-6
- Milani D, Manzoni FM, Pezzani L, et al. Rubinstein-Taybi syndrome: clinical features, genetic basis, diagnosis, and management. Ital J Pediatr. 2015;41:4
- Khandelwal R, Agrawal P, Majumdar MR. Crouzon syndrome. BMJ Case Rep. 2012 May 8; 2012.

- El-Khateeb EA. The H syndrome. *Pediatr Dermatol.* 2010;27:65-8
- Özgür A, Çabuk G, Arpacı R, Baz K, Katar D. Happle-Tinschert syndrome: report of a case with hemimegalencephaly. *Korean J Radiol.* 2014;15:534-7
- Luo M, Dong H, Zhu Y, et al. POEMS syndrome initially presenting with acral dermatitis. *Int J Dermatol.* 2015 Dec 18.
- Tosti A, Pazzaglia M, Voudouris S, Tosti G. Hypertrichosis of the eyelashes caused by bimatoprost. *J Am Acad Dermatol.* 2004 Nov;51(5 Suppl):S149-50
- Ojeda Vila T, Camacho Martínez FM. Bimatoprost in the treatment of eyelash universalis alopecia areata. *Int J Trichology.* 2010 Jul;2(2):86-8.
- Coronel-Pérez IM, Rodríguez-Rey EM, Camacho-Martínez FM. Latanoprost in the treatment of eyelash alopecia in alopecia areata universalis. *J Eur Acad Dermatol Venereol.* 2010 Apr;24(4):481-5.
- Vergou T, Stratigos AJ, Karapanagiotou EM, et al. Facial hypertrichosis and trichomegaly developing in patients treated with the epidermal growth factor receptor inhibitor erlotinib. *J Am Acad Dermatol.* 2010;63:e56-8
- Farant P. Acquired disorders of hair. Excessive growth of hair. In: *Rook's Textbook of Dermatology.* 9th Ed. UK. P. 89.61-89.62.
- Sprecher E. Inherit hair disorders. In: *Rook's Textbook of Dermatology* 9th Ed. UL. P. 68.1-68.12.
- Camacho-Martínez FM. Hypertrichosis and hirsutism. In: *Bologna JL. Dermatology.* 3rd ed. USA. P. 1115-1120.
- Otberg N, Shapiro J. Trastorno del crecimiento capilar. En: *Fitzpatrick. Dermatología en Medicina general.* 8ª ed. México: panamericana;2014. p. 979-1008.
- De Raeve L, Keymolen K. Congenital hypertrichosis lanuginosa in a father and son. *Arch Dermatol.* 2011;147(6):746-7.
- Wendelin DS, Pope DN, Mallory SB. Hypertrichosis. *J Am Acad Dermatol.* 2003;48(2):161-79; quiz 180-1.
- Rodríguez-Martín M, Sánchez R, Sáez-Rodríguez M, García-Bustínduy M, Sidro M, Pérez N, González S, Alvarez H, Noda A. Congenital plaque-like glomangioma associated with superficial hypertrichosis. *J Am Acad Dermatol.* 2008;58(5 Suppl 1):S92-3.
- Berry RS, Berry TM, Haney M, Shetty A, Yu L, Smidt AC. Congenital dermatofibrosarcoma with associated hypertrichosis. *J Cutan Pathol.* 2013;40(12):990-2, quiz 989.
- Vergani R, Betti R, Martino P, Crosti C. Giant nevoid hypertrichosis in an Iranian girl. *Pediatr Dermatol.* 2002;19(1):64-6.
- Guevara-Sanginés E, Villalobos A, Vega-Memije ME, Mosqueda-Taylor A, Canún-Serrano S, Lacy-Niebla RM. Congenital generalized terminal hypertrichosis with gingival hyperplasia. *Pediatr Dermatol.* 2002;19(2):114-8.
- Salas-Alanis JC, Lopez-Cepeda LD, Elizondo-Rodríguez A, Morales-Barrera ME, Ramos-Garibay AR. Hypertrichosis lanuginosa congenita treated with diode laser epilation during infancy. *Pediatr Dermatol.* 2014;31(4):529-30.
- Pavone P, Praticò AD, Falsaperla R, Ruggieri M, Zollino M, Corsello G, Neri G. Congenital generalized hypertrichosis: the skin as a clue to complex malformation syndromes. *Ital J Pediatr.* 2015;41:55.
- Holland KE, Galbraith SS. Generalized congenital smooth muscle hamartoma presenting with hypertrichosis, excess skin folds, and follicular dimpling. *Pediatr Dermatol.* 2008;25(2):236-9.
- Mendiratta V, Harjai B, Gupta T. Hypertrichosis lanuginosa congenita. *Pediatr Dermatol.* 2008;25(4):483-4.
- Koenig LJ, Lynch DP, Yancey KB. Segmental odontomaxillary dysplasia presenting with facial hypertrichosis, commissural lip clefting, and hyperlinear palms. *Pediatr Dermatol.* 2008;25(4):491-2.
- Martínez de Lagrán Z, González-Pérez R, Asunción Arregui-Murua M, Soloeta-Arechavala R. Hypertrichosis cubiti: another case of a well-recognized but under-reported entity. *Pediatr Dermatol.* 2010;27(3):310-1.
- Reddy S, Antaya RJ. Two cases of isolated anterior cervical hypertrichosis. *Pediatr Dermatol.* 2010;27(5):531-3.
- Attia A, El Noury A, Abd Alhafez M. Intense pulsed light hair removal in a patient with congenital hypertrichosis terminalis. *Pediatr Dermatol.* 2012;29(2):219-20.

- Mitteldorf C, Bertsch HP, Neumann C. [Circumscribed congenital hypertrichosis. Congenital smooth muscle hamartoma--CSMH. Congenital pili arrector hamartoma]. *J Dtsch Dermatol Ges.* 2008;6(5):405-7.
- Waheed R, Khan MH, Bano R, Rashid H. Sequence and structure based assessment of nonsynonymous SNPs in hypertrichosis universalis. *Bioinformation.* 2012;8(7):316-8.
- Rashid RM, White LE. A hairy development in hypertrichosis: a brief review of Ambras syndrome. *Dermatol Online J.* 2007;13(3):8.
- Cervantes A, García-Delgado C, Fernández-Ramírez F, Valencia-Herrera A, Kofman S, Morán-Barroso V. Congenital hypertrichosis universalis in Mexican female twins. *Int J Dermatol.* 2016;55(1):e29-31.
- Chen W, Ring J, Happle R. Congenital generalized hypertrichosis terminalis: a proposed classification and a plea to avoid the ambiguous term "Ambras syndrome". *Eur J Dermatol.* 2015;25(3):223-7.
- DeStefano GM, Fantauzzo KA, Petukhova L, Kurban M, Tadin-Strapps M, Levy B, Warburton D, Cirulli ET, Han Y, Sun X, Shen Y, Shirazi M, Jobanputra V, Cepeda-Valdes R, Cesar Salas-Alanis J, Christiano AM. Position effect on FGF13 associated with X-linked congenital generalized hypertrichosis. *Proc Natl Acad Sci U S A.* 2013;110(19):7790-5.
- Kim GH, Gerami P, Paller AS. Congenital hypertrichotic melanoneurocytoma: a congenital hypertrichotic plaque with overlapping neural and nevoid features. *J Am Acad Dermatol.* 2012;67(4):799-801.
- Jalili IK. Cone-rod congenital amaurosis associated with congenital hypertrichosis: an autosomal recessive condition. *J Med Genet.* 1989;26(8):504-10.
- Sourreil P, Beylot C, Delfour M. [Hamartoma caused by hyperplasia of the arrectores pilorum in a 1-month-old infant]. *Bull Soc Fr Dermatol Syphiligr.* 1969;76(4):602.
- Darley CR, Kirby JD, Besser GM, Munro DD, Edwards CRW, Rees LH. Circulating testosterone, sex hormone binding globulin and prolactin in women with late-onset or pertinent acne vulgaris. *Br J Dermatol.* 1982; 106:517-22.
- Orfanos CE. Antiandrógenos en Dermatología. *Arch Arg Dermatol.* 1982; 32 (supl.1): 51-5.
- Toscano V, Adamo MV, Caiola S, Foli S, Petrangeli E, Cassilli D, Sciarra F. Is hirsutism an evolving syndrome?. *J Endocrinol* 1983; 97:379-87.
- Brown J, Farquhar c, Lee O, et al. Spironolactone vs placebo or in combination with steroids for hirsutism and/or acne. *Cochrane database Syst Rev* (2): CD000194 (Abril 2009)
- Venturoli S, Marescalchi O, Colombo FM. A prospective randomized trial comparing low dose flutamide, finasteride, ketoconazole, and cyproterone acetate-estrogen regimens in the treatment of hirsutism. *J Clin Endocrinol Metab* 1999; 84:1304-10
- Swiglo BA, Cosma M, Flynn DN. Clinical review: antiandrogens for the treatment of hirsutism: a systematic review and meta analyses of randomized controlled trials. *J clin Endocrinol Metab* 2008; 93: 1153-60
- Townsend KA, Marlowe KF. Relative safety and efficacy of finasteride for treatment of hirsutism. *Ann Pharmacother* 2004; 38: 1070-3
- Smith SR, Piacquadio DJ, Beger B, Littler C. eflornitine cream combined with laser therapy in the management of unwanted facial growth in women: a randomized trial. *Dermatol Surg* 2006; 32: 1237-43
- Hoffmann R. A 4 month, open label study evaluating the efficacy of eflornithine 11.5% cream in the treatment of unwanted facial hair in women using trichoscan. *Eur J Dermatol* 2008; 18:65-70
- Sovak M, Seligson AL, Kucerova R, Bienova M. Fluridil, a rationally designed topical agent for androgenetic alopecia: first clinical experience. *Dermatol Surg* 2003; 28: 678-85
- PCOs and other androgen excess-related conditions Can change in dietary intake make differences Liepa. *Nutr Clin Prac* 2008;23(1):63-71 Updates in the Management of Hirsutism Jane Tran and cols. Vol 14 Number 2 2005
- V. Robinson. A study of damaged hair. *J. Soc. Cosmet.Chem.*27, 155-161 (1976) C Zviak, Ciencia del Cuidado del Cabello. Ed Masson S.A., España, 1987
- J. Gray J, Dawber R. Hair and Scalp Disorders. Ed. Blackwell Science Ltd. London 1999
- Wan Song Hong, Morphological change of men's hair shaft by weathering. *Korean Electron Microscopy* (2000) 30 (1),11-20

- C. Park, Structural development of scalp hair in children and effects of cosmetologic physico-chemical treatments on adult scalp hair. *Applied Microscopy*, (2002) 32(4), 339-344
- C Bouillon, J Wilkinson. *The Science of Hair Care* CRC Press, 2005
- R D. Sinclair. Healthy Hair: What is it? *J. Invest. Dermat. Symp. Proceedings*, (2007) vol 12
- M. Benzarti, M.B. Tkaya, C.P. Mattei, H. Zahouani, Hair mechanical properties depending on age and origin, *World Acad. Sci. Eng. Technol* (2011) 471–477.
- N, Madnani, K Khan, Hair cosmetics. *Indian J Dermatol Venereol Leprol* (2013) 79:654-67
- ML Bovcon, M Cisterna, *Tricología para la Peluquería de Avanzada* –Ed Miguel Cisterna - María Laura Bovcon - Argentina 2016
- Grimalt, R. "Cabello e imagen [Editorial]." *Piel* 16.5 (2001): 221-224.
- Hair Cosmetics: An Overview. *Int J Trichology*. 2015 Jan-Mar; 7(1): 2–15.
- *Dermatology on Line Journal*. 2012, Jeff C, Donovan, Ron L Shapiro, Maria K Hordinsky, A Review of Scalp camouflaging agents and prostheses for individuals with hair loss

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	TRASPLANTE CAPILAR: INTRODUCCIÓN, INDICACIONES Y ASPECTOS TÉCNICOS	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)		Presencial
	x	Semipresencial
		On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

Introducción. Recuerdo anatomo-fisiológico del folículo. Tipos de cirugía capilar. Historia de la cirugía capilar. Cirugía capilar antes del trasplante de microinjertos foliculares.

- Recuerdo anatomo-fisiológico del folículo.
- Historia de cirugía capilar.
- Tipos de cirugía capilar.
- Cirugía capilar antes del trasplante de microinjertos foliculares.

Trasplante de unidades foliculares: concepto, tipos, resultados, complicaciones. Indicaciones y selección del paciente. Fases del trasplante capilar. Orientaciones para el diseño del trasplante.

1. Revisión general del estado actual del Trasplante de unidades foliculares.
 - Concepto general y tipos de trasplante
 - Factores que condicionan la supervivencia de los injertos
 - Resultados clínicos que se pueden conseguir
 - Listado y comentario de posibles complicaciones:
 - Cicatrices, sangrado, ausencia o escaso crecimiento de los injertos trasplantados, resultados antiestéticos no naturales (por qué los vemos todavía), etc.
2. Fases de la técnica de Trasplante de unidades foliculares.
 - Preoperatorio (analítica previa, sedación oral)
 - Anestesia de la zona donante
 - Extracción de las unidades foliculares de la zona donante
 - Anestesia de la zona receptora
 - Implantación de los injertos
 - Tiempo operatorio
 - Postoperatorio
3. Indicaciones y Selección del Paciente.
 - Qué alopecias se pueden trasplantar y cuáles no se deben.
 - Alopecias androgenéticas (hombre, mujer)
 - Cicatriciales (primarias, secundarias)

- Otras
- Cómo seleccionar al buen candidato a trasplante:
- Variables a tener en cuenta (Densidad zona donante, extensión de alopecia zona receptora, expectativas del paciente, etc.)
- 4. Orientaciones generales en el diseño del trasplante.
 - Planificación general del trasplante
 - Diseño de la línea de implantación frontal en el hombre y la mujer
 - Diseño del trasplante en vertex (coronilla)
- 5. Trasplante capilar en mujeres y consideraciones en raza negra y asiática.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153
- Poblet E, Jiménez-Acosta F, Hardman JA, Escario E, Paus R. Is the eccrine gland an integral, functionally important component of the human scalp pilosebaceous unit? *Exp Dermatol* 2016; 25: 149-50.
- Jimenez F, Ruifernandez JM. Distribution of human hair follicles in follicular units. *Dermatol Surg* 1999; 25: 294-8.
- Poblet E, Ortega F, Jimenez F. The arrector pili muscle and the follicular unit of the scalp: a microscopic anatomy study. *Dermatol Surg* 2002; 28: 800-803.
- Oh JW, Kloepper J, Langan EA, et al. A guide to studying human hair follicle cycling in vivo. *J Invest Dermatol* 2016; 136: 34-44. This article is a comprehensive guide of how to recognize macro and microscopically human hair follicles at different stages of the hair cycle, integrating simple morphologic criteria with immunohistochemical markers.
- Jimenez F, Izeta A, Poblet E. Morphometric analysis of the human scalp hair follicle: practical implications for the hair transplant surgeon and hair regeneration studies. *Dermatol Surg* 2011; 37: 58-64. This article provides measurements of the different compartments of the terminal scalp hair follicle useful for the hair transplant surgeon
- Shiell RC. A review of modern surgical hair restoration techniques. *J Cutan Aesthet Surg* 2008;1:1216
- Robert M Bernstein. *Follicular Unit Hair Transplantation* 2010
- D. Pathomvanich and K. Imagawa (eds.), *Hair Restoration Surgery in Asians* 3. DOI 10.1007/978-4-431-99659-0_1, © Springer 2010
- F. Jimenez-Acosta e I. Ponce. Técnica actual del trasplante de pelo de unidades foliculares. *Actas Dermosifiliogr.* 2010;101(4):291–306
- Kutlubay Z, Kucuktas M, Engin B (2013) Hair Transplantation in the Cicatricial Alopecias. *Hair Ther Transplant* 3: 109. doi:10.4172/2167-0951.1000109
- Lindsay M. Bicknell , Natalie Kash BS MSIII, Chitra Kavouspour MS MSIII, Rashid M. Rashid MD PhD. Follicular unit extraction hair transplant harvest: a review of current recommendations and future considerations. *Dermatology Online Journal* Volume 20 Number 3 March 2014
- Moreno Arias. G, Camps Fresneda-Alejando. Trasplante de pelo. *Laboratorios Thea innovación.*

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	TRASPLANTE CAPILAR: TÉCNICA FUT Y TÉCNICA FUE	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	4	
Modalidad (elegir una opción)		Presencial
	x	Semipresencial
		On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)	
Número de horas presenciales/on-line asistencia profesor	40
Número de horas de trabajo personal del estudiante	60
Total horas	100

CONTENIDOS (Temario)
<p>Trasplante de unidades foliculares: concepto, tipos, resultados, complicaciones. Indicaciones y selección del paciente. Fases del trasplante capilar. Orientaciones para el diseño del trasplante.</p> <ol style="list-style-type: none"> 1. Revisión general del estado actual del Trasplante de unidades foliculares. <ul style="list-style-type: none"> - Concepto general y tipos de trasplante - Factores que condicionan la supervivencia de los injertos - Resultados clínicos que se pueden conseguir - Listado y comentario de posibles complicaciones: - Cicatrices, sangrado, ausencia o escaso crecimiento de los injertos trasplantados, resultados antiestéticos no naturales (por qué los vemos todavía), etc. 2. Fases de la técnica de Trasplante de unidades foliculares. <ul style="list-style-type: none"> - Preoperatorio (analítica previa, sedación oral) - Anestesia de la zona donante - Extracción de las unidades foliculares de la zona donante - Anestesia de la zona receptora - Implantación de los injertos - Tiempo operatorio - Postoperatorio 3. Indicaciones y Selección del Paciente. <ul style="list-style-type: none"> - Qué alopecias se pueden trasplantar y cuáles no se deben: - Alopecias androgenéticas (hombre, mujer) - Cicatriciales (primarias, secundarias) - Otras - Cómo seleccionar al buen candidato a trasplante: - Variables a tener en cuenta (Densidad zona donante, extensión de alopecia zona receptora, expectativas del paciente, etc.) 4. Orientaciones generales en el diseño del trasplante. <ul style="list-style-type: none"> - Planificación general del trasplante - Diseño de la línea de implantación frontal en el hombre y la mujer

- Diseño del trasplante en vertex (coronilla)

5. Trasplante capilar en mujeres y consideraciones en raza negra y asiática.

Técnica FUT: Strip. Ventajas, desventajas, indicaciones, aspectos técnicos, postoperatorio, resultados.

Casos prácticos.

- Introducción. Indicaciones. Ventajas y desventajas técnicas FUT.
- Aspectos técnicos, valoración pre-quirúrgica.
- Sutura tricofítica o convencional. Cuidados post-operatorios. Segundas intervenciones.
- Casos clínicos técnica FUT.

Técnica FUE. Ventajas, desventajas, indicaciones, aspectos técnicos, postoperatorio, resultados. Casos prácticos.

- Ventajas y desventajas. Aspectos técnicos.
- Indicaciones.
- FUE postoperative
- Technical optimization and newness of FUE.
- FUE: Megasections. Advantages and disadvantages.
- Técnica FUE. Casos clínicos.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Unger W, Unger R, Wesley C. Estimating the Number of Lifetime Follicular Units: A Survey and Comments of Experienced Hair Transplant Surgeons. *Dermatol Surg.* 2012;1-6
- Feily A, Moeineddin F. Feily's method as new mode of hair grafting in prevention of scalp necrosis even in dense hair transplantation. *Dermatol Pract Concept.* 2015 Jul 31;5(3):41-6.
- Frechet, P. Donor harvesting with invisible scar. *Hair Transplant Forum International.* 2005; 15(4):119, 120.
- Gho CG, Neumann HA. Advances in Hair Transplantation: Longitudinal Partial Follicular Unit Transplantation. *Curr Probl Dermatol.* 2015 Feb;47:150-7
- Gho CG, Neumann HA. The influence of preservation solution on the viability of grafts in hair transplantation surgery. *Plast Reconstr Surg Glob Open.* 2014 Jan 6;1(9):e90.
- Gupta AK, Lyons DC, Daigle D. Progression of surgical hair restoration techniques. *J Cutan Med Surg.* 2015 Jan-Feb;19(1):17-21.
- Huang YL, Chang SL, Lee MC, Chang CH, Hu S, Gold MH. Measuring occipital scalp laxity before donor strip harvesting in hair transplantation. *J Drugs Dermatol.* 2014 Oct;13(10):1248-52
- Jimenez F, Shiell RC. The Okuda papers: an extraordinary--but unfortunately unrecognized--piece of work that could have changed the history of hair transplantation. *Exp Dermatol.* 2015 Mar;24(3):185-6.
- Liu JQ, Zhao KB, Feng ZH, Qi FZ. Hair follicle units promote re-epithelialization in chronic cutaneous wounds: A clinical case series study. *Exp Ther Med.* 2015 Jul;10(1):25-30.
- Loganathan E, Sarvajnamurthy S, Gorur D, Suresh DH, Siddaraju MN, Narasimhan RT. Complications of hair restoration surgery: a retrospective analysis. *Int J Trichology.* 2014 Oct;6(4):168-72.
- Nirmal B, Somiah S, Sacchidanand SA. Reply to expert comments - a study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg.* 2014 Apr;7(2):139.
- Nirmal B, Somiah S, Sacchidanand SA. A study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg.* 2013 Oct;6(4):210-3
- Nirmal B. et al. A study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg.* 2013; 6(4): 210-213
- Marzola, M. Trichophytic closure of the donor area. *Hair Transplant Forum International.* 2005; 15(4):113, 116.
- Park HS, Kim JY, Choe YS, Han W, An JS, Seo KK. Alternative method for creating fine hairs with hair

- removal laser in hair transplantation for hairline correction. *Ann Dermatol.* 2015 Feb;27(1):21-5.
- Poswal A. A comment on A Study of Donor Area in Follicular Unit Hair Transplantation. *J Cutan Aesthet Surg.* 2014 Jan;7(1):68-9.
 - Rogers NE. Hair transplantation update. *Semin Cutan Med Surg.* 2015 Jun;34(2):89-94
 - Rose PT. Hair restoration surgery: challenges and solutions. *Clin Cosmet Investig Dermatol.* 2015 Jul 15;8:361-70
 - Rose, P. "Ledge" closure utilizing de-epithelialization of the inferior border. *Hair Transplant Forum International.* 2005; 15(4):120.
 - Siefferman J, Khelemsky Y. Occipital neuralgia after hair transplantation and its treatment. *Case Rep Neurol Med.* 2015;2015:428413
 - Shahmoradi Z, Abtahi-Naeini B, Pourazizi M. Erosive pustular dermatosis of the scalp following hair transplantation. *Adv Biomed Res.* 2014 Aug 22;3:176.
 - Yamamoto k. Double trichophytic closure with wavy two layered closure for optimal hair transplantation scar. *Dermatol Surg.* 2012; 38: 664-9
 - Yeo S. et al. Simplified V-Shape Incision Technique for Saving Hair Follicles *Arch Aesthetic Plast Surg.* 2014 Jun;20(2):104-108.
 - MANFRED W.G. LUCAS M.D. The Use of Minigrafts in Hair Transplantation Surgery. *Dermatologic Surgery.* Volume 14, Issue 12

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	DISPOSITIVOS PARA TRASPLANTE. ÁREAS ESPECIALES. EQUIPO AUXILIAR. CREAR UNA UNIDAD DE TRICOLOGÍA	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	6	
Modalidad (elegir una opción)	<input type="checkbox"/>	Presencial
	<input checked="" type="checkbox"/>	Semipresencial
	<input type="checkbox"/>	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	60
Número de horas de trabajo personal del estudiante	90
Total horas	150

CONTENIDOS (Temario)

Dispositivos para trasplante capilar: gafas-lupa, material quirúrgico, microscopios, implanters, SAFER, robot. Trasplante capilar en cejas, pestañas y otras áreas corporales.

- Dispositivos para trasplante capilar: gafas-lupa, material quirúrgico, microscopios.
- Qué es lo que se requiere como mínimo para iniciar con Trasplante capilar en consultorio. Implanters.
- SAFER.
- Robot.
- Trasplante capilar en cejas, pestañas y otras áreas corporales.
- Trasplante capilar de pestañas.
- Aplicación del Trasplante capilar en úlceras que no cicatrizan.

Formación no médica del equipo auxiliar: técnicos cortadores, enfermería, cuidados pre y postquirúrgicos, personal administrativo, atención telefónica.

1. Formación de Técnicos Especializados en Cirugía Capilar.

- *Slivering: disección de la Tira obtenida en filas de Unidades Foliculares para facilitar y acelerar el proceso de corte.*
- *Cutting (Corte): Disección de Unidades Foliculares. Métodos de disección (empleo de lupas o estereomicroscopios), ventajas y desventajas de cada técnica.*
- *Placing (Implantación): Método de implantación de Unidades Foliculares en la zona receptora. Métodos de implantación (Forceps Implantation, Hair Implanter, etc). Ventajas y desventajas de las diferentes técnicas.*

2. Enfermería en cirugía capilar.

- *Preparación del paciente antes de técnica FUSS y antes de técnica FUE.*
- *Medicación, anestesia, manejo de complicaciones en la sala de Cirugía y supervisión de técnicos de trasplante.*

3. Cuidados pre y post-operatorios.

- *Cuidados Preoperatorios.*

- *Día de la Intervención. Aspectos a tener en cuenta.*
- *Cuidados Postoperatorios. Claves médicas.*
- *Adecuado seguimiento del paciente.*

4. Personal Administrativo y Comercial.

- *El papel de internet.*
- *Gestión de una Clínica especializada en Trasplante Capilar. Maximización del tiempo y de los recursos.*

Creación de una Unidad de Tricología y Trasplante Capilar: aspectos legales, administrativos.

Marketing. Personal y material necesario. Plan económico.

- Aspectos legales y administrativos de unidad trico/trasplante.
- Marketing.
- Personal y material.
- Plan económico.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Unger W, Unger R, Wesley C. Estimating the Number of Lifetime Follicular Units: A Survey and Comments of Experienced Hair Transplant Surgeons. *Dermatol Surg.* 2012;1-6
- Feily A, Moeineddin F. Feily's method as new mode of hair grafting in prevention of scalp necrosis even in dense hair transplantation. *Dermatol Pract Concept.* 2015 Jul 31;5(3):41-6.
- Frechet, P. Donor harvesting with invisible scar. *Hair Transplant Forum International.* 2005; 15(4):119, 120.
- Gho CG, Neumann HA. Advances in Hair Transplantation: Longitudinal Partial Follicular Unit Transplantation. *Curr Probl Dermatol.* 2015 Feb;47:150-7
- Gho CG, Neumann HA. The influence of preservation solution on the viability of grafts in hair transplantation surgery. *Plast Reconstr Surg Glob Open.* 2014 Jan 6;1(9):e90.
- Gupta AK, Lyons DC, Daigle D. Progression of surgical hair restoration techniques. *J Cutan Med Surg.* 2015 Jan-Feb;19(1):17-21.
- Huang YL, Chang SL, Lee MC, Chang CH, Hu S, Gold MH. Measuring occipital scalp laxity before donor strip harvesting in hair transplantation. *J Drugs Dermatol.* 2014 Oct;13(10):1248-52
- Jimenez F, Shiell RC. The Okuda papers: an extraordinary--but unfortunately unrecognized--piece of work that could have changed the history of hair transplantation. *Exp Dermatol.* 2015 Mar;24(3):185-6.
- Liu JQ, Zhao KB, Feng ZH, Qi FZ. Hair follicle units promote re-epithelialization in chronic cutaneous wounds: A clinical case series study. *Exp Ther Med.* 2015 Jul;10(1):25-30.
- Loganathan E, Sarvajnamurthy S, Gorur D, Suresh DH, Siddaraju MN, Narasimhan RT. Complications of hair restoration surgery: a retrospective analysis. *Int J Trichology.* 2014 Oct;6(4):168-72.
- Nirmal B, Somiah S, Sacchidanand SA. Reply to expert comments - a study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg.* 2014 Apr;7(2):139.
- Nirmal B, Somiah S, Sacchidanand SA. A study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg.* 2013 Oct;6(4):210-3
- Nirmal B. et al. A study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg.* 2013; 6(4): 210-213
- Marzola, M. Trichophytic closure of the donor area. *Hair Transplant Forum International.* 2005; 15(4):113, 116.
- Park HS, Kim JY, Choe YS, Han W, An JS, Seo KK. Alternative method for creating fine hairs with hair removal laser in hair transplantation for hairline correction. *Ann Dermatol.* 2015 Feb;27(1):21-5.
- Poswal A. A comment on A Study of Donor Area in Follicular Unit Hair Transplantation. *J Cutan*

Aesthet Surg. 2014 Jan;7(1):68-9.

- Rogers NE. Hair transplantation update. Semin Cutan Med Surg. 2015 Jun;34(2):89-94
- Rose PT. Hair restoration surgery: challenges and solutions. Clin Cosmet Investig Dermatol. 2015 Jul 15;8:361-70
- Rose, P. "Ledge" closure utilizing de-epithelialization of the inferior border. Hair Transplant Forum International. 2005; 15(4):120.
- Siefferman J, Khelemsky Y. Occipital neuralgia after hair transplantation and its treatment. Case Rep Neurol Med. 2015;2015:428413
- Shahmoradi Z, Abtahi-Naeini B, Pourazizi M. Erosive pustular dermatosis of the scalp following hair transplantation. Adv Biomed Res. 2014 Aug 22;3:176.
- Yamamoto k. Double trichophytic closure with wavy two layered closure for optimal hair transplantation scar. Dermatol Surg. 2012; 38: 664-9
- Yeo S. et al. Simplified V-Shape Incision Technique for Saving Hair Follicles Arch Aesthetic Plast Surg. 2014 Jun;20(2):104-108.
- MANFRED W.G. LUCAS M.D. The Use of Minigrafts in Hair Transplantation Surgery. Dermatologic Surgery. Volume 14, Issue 12

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	UNIDAD DE TRICOLOGÍA, ORGANIZACIÓN Y TÉCNICAS DE EXPLORACIÓN. CLASES MAGISTRALES RESUMEN	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)		Presencial
	x	Semipresencial
		On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

- **El trasplante capilar paso a paso**
 - Tipos e indicaciones
 - Diseño y preparación del paciente
 - Anestesia y procedimiento quirúrgico (extracción – procesamiento de unidades foliculares - incisiones – implantación). Vídeos quirúrgicos.
 - Fin de la cirugía: cuidados postoperatorios y recomendaciones
- **Estudio de casos en tricología.**

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Manual Práctico de Tricología. #TricoHRC- Vañó, S. — Jaén, P. ISBN-13: 9788409101153

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	UNIDAD DE TRASPLANTE CAPILAR. VISUALIZACIÓN DE REALIZACIÓN DE UN TRASPLANTE CAPILAR	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	3	
Modalidad (elegir una opción)	<input type="checkbox"/>	Presencial
	<input checked="" type="checkbox"/>	Semipresencial
	<input type="checkbox"/>	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	30
Número de horas de trabajo personal del estudiante	45
Total horas	75

CONTENIDOS (Temario)

Descripción de la organización de una Unidad de Trasplante capilar, material necesario y logística.
Visualización de procedimientos de trasplante capilar.

EVALUACIÓN

Examen tipo test

BIBLIOGRAFÍA

- Unger W, Unger R, Wesley C. Estimating the Number of Lifetime Follicular Units: A Survey and Comments of Experienced Hair Transplant Surgeons. *Dermatol Surg.* 2012;1-6
- Feily A, Moeineddin F. Feily's method as new mode of hair grafting in prevention of scalp necrosis even in dense hair transplantation. *Dermatol Pract Concept.* 2015 Jul 31;5(3):41-6.
- Frechet, P. Donor harvesting with invisible scar. *Hair Transplant Forum International.* 2005; 15(4):119, 120.
- Gho CG, Neumann HA. Advances in Hair Transplantation: Longitudinal Partial Follicular Unit Transplantation. *Curr Probl Dermatol.* 2015 Feb;47:150-7
- Gho CG, Neumann HA. The influence of preservation solution on the viability of grafts in hair transplantation surgery. *Plast Reconstr Surg Glob Open.* 2014 Jan 6;1(9):e90.
- Gupta AK, Lyons DC, Daigle D. Progression of surgical hair restoration techniques. *J Cutan Med Surg.* 2015 Jan-Feb;19(1):17-21.
- Huang YL, Chang SL, Lee MC, Chang CH, Hu S, Gold MH. Measuring occipital scalp laxity before donor strip harvesting in hair transplantation. *J Drugs Dermatol.* 2014 Oct;13(10):1248-52
- Jimenez F, Shiell RC. The Okuda papers: an extraordinary--but unfortunately unrecognized--piece of work that could have changed the history of hair transplantation. *Exp Dermatol.* 2015 Mar;24(3):185-6.
- Liu JQ, Zhao KB, Feng ZH, Qi FZ. Hair follicle units promote re-epithelialization in chronic cutaneous wounds: A clinical case series study. *Exp Ther Med.* 2015 Jul;10(1):25-30.

- Loganathan E, Sarvajnamurthy S, Gorur D, Suresh DH, Siddaraju MN, Narasimhan RT. Complications of hair restoration surgery: a retrospective analysis. *Int J Trichology*. 2014 Oct;6(4):168-72.
- Nirmal B, Somiah S, Sacchidanand SA. Reply to expert comments - a study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg*. 2014 Apr;7(2):139.
- Nirmal B, Somiah S, Sacchidanand SA. A study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg*. 2013 Oct;6(4):210-3
- Nirmal B. et al. A study of donor area in follicular unit hair transplantation. *J Cutan Aesthet Surg*. 2013; 6(4): 210-213
- Marzola, M. Trichophytic closure of the donor area. *Hair Transplant Forum International*. 2005; 15(4):113, 116.
- Park HS, Kim JY, Choe YS, Han W, An JS, Seo KK. Alternative method for creating fine hairs with hair removal laser in hair transplantation for hairline correction. *Ann Dermatol*. 2015 Feb;27(1):21-5.
- Poswal A. A comment on A Study of Donor Area in Follicular Unit Hair Transplantation. *J Cutan Aesthet Surg*. 2014 Jan;7(1):68-9.
- Rogers NE. Hair transplantation update. *Semin Cutan Med Surg*. 2015 Jun;34(2):89-94
- Rose PT. Hair restoration surgery: challenges and solutions. *Clin Cosmet Investig Dermatol*. 2015 Jul 15;8:361-70
- Rose, P. "Ledge" closure utilizing de-epithelialization of the inferior border. *Hair Transplant Forum International*. 2005; 15(4):120.
- Siefferman J, Khelemsky Y. Occipital neuralgia after hair transplantation and its treatment. *Case Rep Neurol Med*. 2015;2015:428413
- Shahmoradi Z, Abtahi-Naeini B, Pourazizi M. Erosive pustular dermatosis of the scalp following hair transplantation. *Adv Biomed Res*. 2014 Aug 22;3:176.
- Yamamoto k. Double trichophytic closure with wavy two layered closure for optimal hair transplantation scar. *Dermatol Surg*. 2012; 38: 664-9
- Yeo S. et al. Simplified V-Shape Incision Technique for Saving Hair Follicles *Arch Aesthetic Plast Surg*. 2014 Jun;20(2):104-108.
- MANFRED W.G. LUCAS M.D. The Use of Minigrafts in Hair Transplantation Surgery. *Dermatologic Surgery*. Volume 14, Issue 12

GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	REALIZACIÓN DE TRASPLANTE CAPILAR TIPO FUT Y TIPO FUE SUPERVISADO	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	4	
Modalidad (elegir una opción)	<input type="checkbox"/>	Presencial
	<input checked="" type="checkbox"/>	Semipresencial
	<input type="checkbox"/>	On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)

Número de horas presenciales/on-line asistencia profesor	40
Número de horas de trabajo personal del estudiante	60
Total horas	100

CONTENIDOS (Temario)

Realización de un trasplante capilar, técnica de la tira de forma supervisada.
Realización de un trasplante capilar, técnica tipo FUE de forma supervisada

EVALUACIÓN

Evaluación individual del tutor asignado

BIBLIOGRAFÍA

- Unger W, Unger R, Wesley C. Estimating the Number of Lifetime Follicular Units: A Survey and Comments of Experienced Hair Transplant Surgeons. *Dermatol Surg.* 2012;1-6
- Feily A, Moeineddin F. Feily's method as new mode of hair grafting in prevention of scalp necrosis even in dense hair transplantation. *Dermatol Pract Concept.* 2015 Jul 31;5(3):41-6.
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- Marzola, M. Trichophytic closure of the donor area. *Hair Transplant Forum International*. 2005; 15(4):113, 116.
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- Rose PT. Hair restoration surgery: challenges and solutions. *Clin Cosmet Investig Dermatol*. 2015 Jul 15;8:361-70
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- Shahmoradi Z, Abtahi-Naeini B, Pourazizi M. Erosive pustular dermatosis of the scalp following hair transplantation. *Adv Biomed Res*. 2014 Aug 22;3:176.
- Yamamoto k. Double trichophytic closure with wavy two layered closure for optimal hair transplantation scar. *Dermatol Surg*. 2012; 38: 664-9
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GUÍA DOCENTE

Año académico	2020-2021	
Estudio	Máster Internacional en Tricología y Trasplante Capilar (EÑ59)	
Nombre de la asignatura	TRABAJO FIN DE MÁSTER	
Carácter (Obligatoria/Optativa)	OB	
Créditos (1 ECTS=25 horas)	10	
Modalidad (elegir una opción)		Presencial
	x	Semipresencial
		On-line
Profesor responsable	Sergio Vañó	
Idioma en el que se imparte	Español	

DISTRIBUCIÓN DE CRÉDITOS (especificar en horas)	
Número de horas presenciales/on-line asistencia profesor	100
Número de horas de trabajo personal del estudiante	150
Total horas	250

CONTENIDOS (Temario)
Realización de un Trabajo Fin de Máster consistente en una revisión bibliográfica minuciosa de un tema concreto o bien un proyecto de investigación planteado por el alumno.

EVALUACIÓN
Los criterios de evaluación del TFM son: <ul style="list-style-type: none"> -El contenido Se ajusta al tema propuesto. -El contenido está bien escrito gramaticalmente y bien desarrollado. -En la discusión hace una buena reflexión y desarrollo del tema de forma original. -Se aporta bibliografía significativa. -Las conclusiones son personales del alumno. -Aporta información actualizada.

BIBLIOGRAFÍA
Se aportará en función del tema asignado