

Finally, and in agreement with Boffa and Degaetano,<sup>7</sup> we believe that cryotherapy could be considered a first-line, safe, accessible, affordable, and effective treatment for CPH.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

## References

1. Pérez A, Rütten A, Gold R, Urbina F, Misad C, Izquierdo MJ, et al. Circumscribed palmar or plantar hypokeratosis: A distinctive epidermal malformation of the palms or soles. *J Am Acad Dermatol.* 2002;47:21–7.
2. Arbesman J, Loss LC, Helm KF, Rothman IL. A congenital case of circumscribed acral hypokeratosis. *Pediatr Dermatol.* 2012;29:485–7.
3. Urbina F, Pérez A, Requena L, Rütten A. Hipoqueratosis circunscrita palmar o plantar. Conocimientos y controversias tras 10 años de su descripción. *Actas Dermosifiliogr.* 2014;105:574–82.
4. Obermoser G, Zelger B. Multifocal circumscribed palmar hypokeratosis: Malformation or not? *J Am Acad Dermatol.* 2003;49:1197–8.

5. Ishiko A, Dekio I, Fujimoto A, Kameyama K, Sakamoto M, Benno Y, et al. Abnormal keratin expression in circumscribed palmar hypokeratosis. *J Am Acad Dermatol.* 2007;57:285–91.
6. Kanitakis J, Lora V, Balme B, Roby J. Premalignant circumscribed palmar hypokeratosis: A new form of circumscribed palmar hypokeratosis? Case report and literature review. *Dermatology.* 2010;220:143–6.
7. Boffa MJ, Degaetano JS. Circumscribed palmar hypokeratosis: Successful treatment with cryotherapy. *J Eur Acad Dermatol Venereol.* 2007;21:420–1.

J. Boix-Vilanova,<sup>a,\*</sup> M.C. Montis-Palos,<sup>a</sup> A. Giacaman,<sup>a</sup> E. Antón-Valentí<sup>b</sup>

<sup>a</sup> Servicio de Dermatología, Hospital Universitari Son Espases, Palma de Mallorca, Islas Baleares, Spain

<sup>b</sup> Servicio de Anatomía Patológica, Hospital Universitari Son Espases, Palma de Mallorca, Islas Baleares, Spain

\* Corresponding author.

E-mail address: julian.boix@gmail.com (J. Boix-Vilanova). 1578-2190/

© 2018 Elsevier España, S.L.U. and AEDV. Published by Elsevier España, S.L.U. All rights reserved.

## Usefulness of Reflectance Confocal Microscopy For in Vivo Diagnosis of Sebomatricomas<sup>☆</sup>



### Utilidad de la microscopía confocal de reflectancia para el diagnóstico in vivo de los sebomatricomas

To the Editor:

There is a spectrum of sebaceous neoplasms, ranging from indolent lesions to sebaceous carcinoma. The nomenclature used in the literature is somewhat controversial, and to date no standardized classification scheme exists.<sup>1</sup> Sánchez Yus and coworkers<sup>2</sup> suggested that sebaceous adenoma and sebaceoma represent 2 extremes of a spectrum of benign neoplasms with sebaceous differentiation and differing degrees of maturation, with higher and lower percentages of mature cells, respectively, and proposed the term *sebomatricoma* to describe this spectrum. We present 2 cases that illustrate the usefulness of reflectance confocal microscopy (RCM) for the diagnosis and characterization of sebomatricoma.

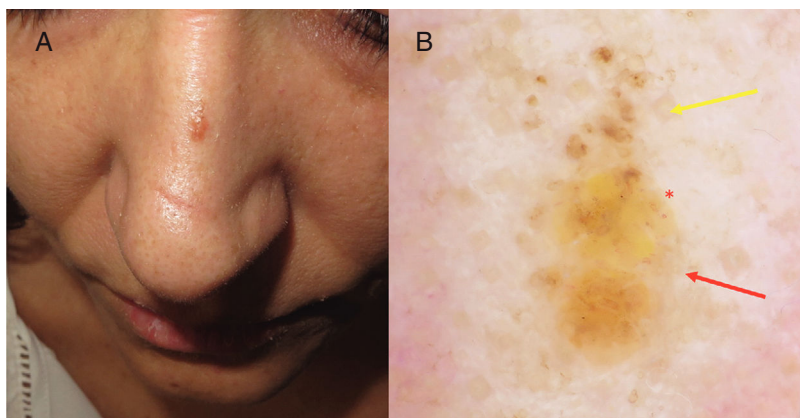
## Case 1

The patient was a 48-year-old woman with hypothyroidism who was seen for a slow-growing lesion on the nasal dorsum that had appeared several years earlier. Dermoscopic examination of the 4-mm, skin-colored papule revealed brown globules predominating in the upper half, yellowish unstructured areas in the lower half, and regular linear vessels (Fig. 1). RCM revealed the presence of ovoid cells with a dark, round, central nucleus and abundant bright granular cytoplasm with very well-defined borders, features typical of sebocytes. There were few very large, bright speckled cells (mature sebocytes) and a predominance of less reflective cells with less abundant cytoplasm (immature sebocytes) that were aggregated within nodules. RCM also revealed circular hyporeflexive spaces (ducts with sebaceous differentiation), rounded, hyperreflective structures surrounded by a dark halo (corneal cysts), and abundant bright, cotton-like cells with no visible nucleus, irregular morphology, and poorly-defined borders that were gathered in small groups (macrophages). A diagnosis of sebaceoma was proposed based on the RCM findings, and was confirmed by histology (Fig. 2).

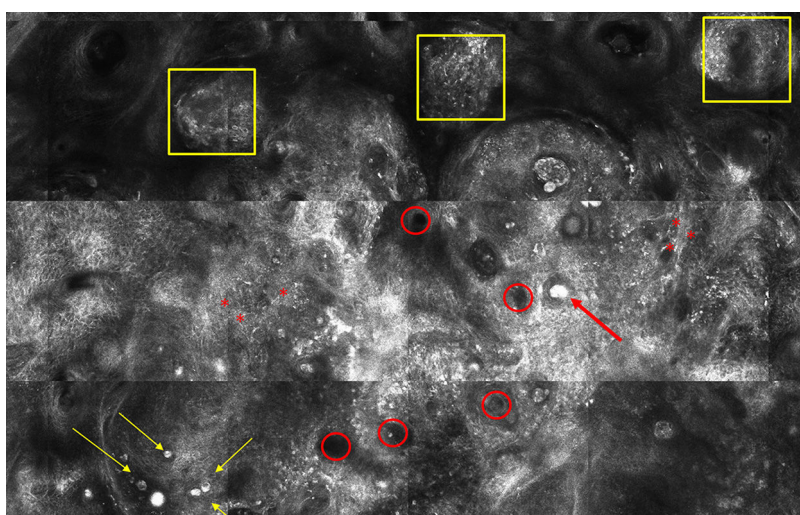
## Case 2

The patient was an 81-year-old woman with dyslipidemia and no past history of interest. She was seen for a lesion on the abdomen that had appeared 1 year earlier. The lesion was an orange, erythematous plaque of 2.5 × 1.5 cm with well-defined borders. Dermoscopy

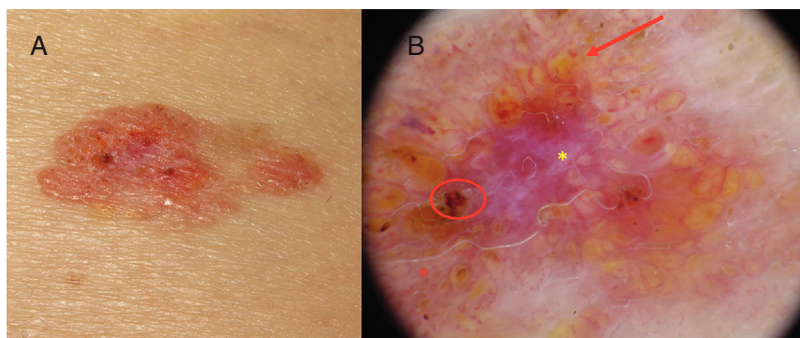
<sup>☆</sup> Please cite this article as: Burillo-Martínez S, Gamo R, Pinedo F, López-Esteban JL. Utilidad de la microscopía confocal de reflectancia para el diagnóstico in vivo de los sebomatricomas. *Actas Dermosifiliogr.* 2019;110:176–179.



**Figure 1** A, Papule of 4 mm on the nasal dorsum. B, Dermoscopic image showing brown globules in the upper half (yellow arrow), yellowish unstructured areas in the lower half (red arrow), and regular linear vessels (red asterisk).



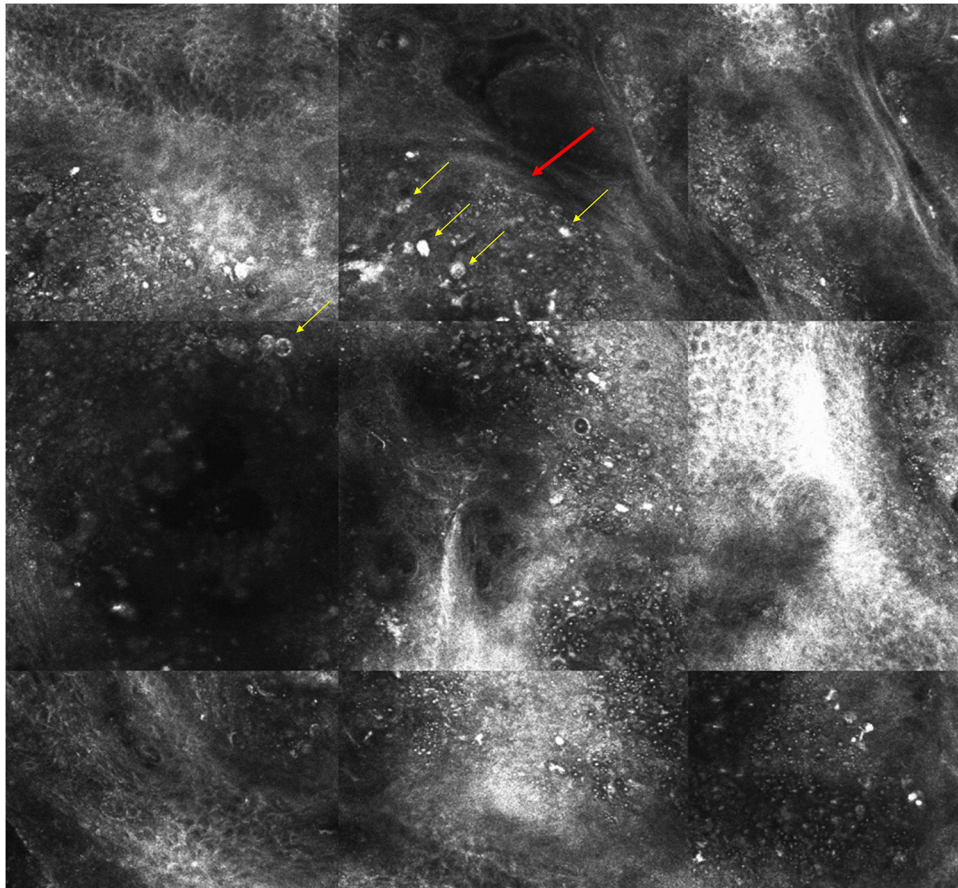
**Figure 2** Confocal microscopy image (2.2 × 1.4 mm) showing small immature sebocytes forming basaloid nests (yellow box), few large, speckled mature sebocytes (yellow arrow), sebaceous ducts (red circle), horn cysts (red arrow), and abundant macrophages (red asterisk).



**Figure 3** A, Well-defined, orange erythematous plaque (2.5 × 1.5 cm) on the abdomen. B, Dermoscopic image showing a whitish, erythematous background (yellow asterisk), abundant yellowish globular structures (red arrow), erosions (red circle), and branched vessels (red asterisk).

revealed an erythematous-white background with abundant yellowish globular structures, erosions, and branched vessels (Fig. 3). RCM revealed many ovoid cells containing abundant cytoplasm filled with hyperreflective granules

(mature sebocytes) that were separated by narrow, dark, intercellular spaces and formed nodules delimited by a thin wall of cells with less abundant cytoplasm and lower reflectance (immature sebocytes) (Fig. 4). Sebaceous ducts



**Figure 4** Confocal microscopy image ( $1.3 \times 1.25$  mm) showing lobes of bright, large, mature sebocytes (yellow arrow) delimited by a thin wall of basaloid cells (red arrow).

were also evident. A diagnosis of sebaceoma was proposed based on the RCM findings, and was confirmed by histology.

## Discussion

The term sebomatricoma was proposed by Sánchez Yus and coworkers<sup>2</sup> to describe a spectrum of benign sebaceous neoplasms of varying degrees of maturation. Sebaceous adenoma and sebaceoma lie at either extreme of this spectrum, and are characterized by higher and lower percentages of mature cells, respectively.

Clinically, sebomatricoma usually presents as solitary yellowish papules or plaques (except in cases of Muir-Torre syndrome), predominantly affecting the cephalic pole. There is little information in the literature on the corresponding dermoscopic features, although a recent study described 2 main clinico-dermoscopic patterns for sebaceous adenoma<sup>3</sup>: nodules or papules with a central crater and elongated crown vessels arranged around an unstructured, whitish-yellow area that may be covered with blood crusts; and nodules or papules without a central crater (as in our patient), with a yellowish-white background, yellowish globular structures, and branching, arborizing vessels. The authors reported no other distinguishing features of sebaceoma. However, these characteristics are shared by several lesions, complicating differential diagnosis. For

example, sebaceous hyperplasia and molluscum contagiosum typically feature yellowish globular structures with crown vessels; basal cell epithelioma characteristically contains branched vessels, albeit more focused than those of sebaceous adenoma; and spinocellular carcinoma, especially keratoacanthoma, can exhibit a central keratin crater with radial vessels.

Therefore, even when clinical and dermoscopic characteristics suggest a diagnosis of sebomatricoma, confirmation by histology has up to now been considered essential. However, RCM, which offers cellular resolution comparable to that of conventional histology, has made noninvasive diagnosis possible. There is little information in the literature on the RCM features of sebomatricoma. Thanks to the excellent correlation between RCM and histological findings in sebomatricoma, this technique enables assessment of the degree of cell maturation, and therefore allows in vivo diagnosis of sebomatricoma and characterization of sebomatricoma subtype, as illustrated in the 2 cases reported here. RCM of sebaceoma (in which immature sebocytes predominate) reveals nests of small, basaloid cells with isolated, bright, large mature sebocytes, in addition to ducts with sebaceous differentiation. By contrast, RCM of sebaceous adenoma reveals lobes of large, rounded or cuboid cells with hyperreflective cytoplasmic granules and a dark central nucleus, delimited by a thin wall of basaloid cells.<sup>4</sup>

Sebaceous adenoma and sebaceoma are benign lesions. However, Muir-Torre syndrome, which was ruled out in both our cases, must be ruled out to establish diagnosis. Considered a phenotypic variant of Lynch syndrome, Muir-Torre syndrome follows an autosomal dominant pattern of inheritance and is characterized by tumors of the sebaceous gland that are associated with early malignant visceral neoplasms (mainly affecting the digestive system), which may appear before or after the cutaneous neoplasms.<sup>5</sup> Given its important clinical implications, accurate diagnosis of sebomatricoma is essential. To this end, RCM constitutes a noninvasive alternative to histology.

## Acknowledgments

The authors thank the patients for providing written consent to the publication of the images included in this letter.

## References

1. Eisen DB, Michael DJ. Sebaceous lesions and their associated syndromes: Part I. *J Am Acad Dermatol*. 2009;61:549–60.
2. Sánchez Yus E, Requena L, Simón P, del Río E. Sebomatricoma: A unifying term that encompasses all benign neoplasms with sebaceous differentiation. *Am J Dermatopathol*. 1995;17:213–21.
3. Moscarella E, Argenziano G, Longo C, Cota C, Ardigò M, Stigliano V, et al. Clinical, dermoscopic and reflectance confocal microscopy features of sebaceous neoplasms in Muir-Torre syndrome. *J Eur Acad Dermatol Venereol*. 2013;27:699–705.
4. Gill M, González S. Enlightening the pink: Use of confocal microscopy in pink lesions. *Dermatol Clin*. 2016;34:443–58.
5. Ponti G, Ponz de Leon M. Muir-Torre syndrome. *Lancet Oncol*. 2005;6:980–7.

S. Burillo-Martínez,<sup>a,\*</sup> R. Gamo,<sup>b</sup> F. Pinedo,<sup>c</sup>  
J.L. López-Estebanz<sup>b</sup>

<sup>a</sup> *Servicio de Dermatología, Hospital Universitario 12 de Octubre, Madrid, España*

<sup>b</sup> *Servicio de Dermatología, Hospital Universitario Fundación Alcorcón, Alcorcón, Madrid, España*

<sup>c</sup> *Servicio de Anatomía Patológica, Hospital Universitario Fundación Alcorcón, Alcorcón, Madrid, España*

\*Corresponding author.

*E-mail address:* [sburillo@hotmail.com](mailto:sburillo@hotmail.com) (S. Burillo-Martínez).  
1578-2190/

© 2018 Elsevier España, S.L.U. and AEDV. Published by Elsevier España, S.L.U. All rights reserved.