that resembles chains of streptococci. Under polarized light microscopy, the metallic granules are brilliantly refractile and produce the characteristic ''starry sky'' image.[1] In chrysiasis (gold deposits in tissue), the granules are typically larger and present red-orange birefringence. Bismuth deposits are positive on Christeller-Komaya staining. The definitive diagnosis is made using electron microscopy, x-ray microanalysis, or other more complex histochemical methods that make it possible to identify the chemical composition of the granules.[1]

In conclusion, we present 2 cases of localized occupational argyria occurring after years of exposure to silver products. The clinical appearance and dermoscopy findings required other blue-colored lesions, particularly melanoma metastases, to be ruled out. Argyria is probably underdiagnosed, and some authors report that up to 40% of exposed individuals can eventually develop the condition.[1] A detailed history will help to orientate the diagnosis.

Acknowledgments

We are grateful to Dr Victor Alegre de Miquel for his valuable contribution to the description of the histopathology findings.

References

1. Kapur N, Landon G, Yu RC. Localized argyria in an antique restorer. Br J Dermatol. 2001;144:191–2.
2. Fariña MC, Escalonilla P, Grilli R, Soriano ML, Martín L, Requena L, et al. Argiria generalizada secundaria a la administración tópica de nitrato de plata. Actas Dermosifiliogr. 1998;89:547–52.
3. Vera Casaño A, Romero Gómez E, Sánchez Fajardo F, Crespo Erchiga V. Argiria generalizada por aplicación tópica de nitrato de plata. Actas Dermosifiliogr. 1998;89:558–61.
4. Schwieger-Briel A, Kiritsi D, Schumann H, Meiss F, Technau K, Bruckner-Tuderman L. Grey spots in a patient with dystrophic epidermolysis bullosa. Br J Dermatol. 2010;163:1124–6.
5. Wang XQ, Chang HE, Francis R, Olszowy H, Liu PY, Kempf M, et al. Silver deposits in cutaneous burn scar tissue is a common phenomenon following application of a silver dressing. J Cutan Pathol. 2009;36:788–92.
6. Tanita Y, Kato T, Hanada K, Tagami H. Blue macules of localized argyria caused by implanted acupuncture needles. Electron microscopy and roentgenographic microanalysis of deposited metal. Arch Dermatol. 1985;121:1550–2.
7. Legat FJ, Goessler W, Schlagenhaufen C, Soyer HP. Argyria after short-contact acupuncture. Lancet. 1998;352:241.
8. Rackoff EM, Benbenisty KM, Maize JC, Maize Jr JC. Localized cutaneous argyria from an acupuncture needle clinically concerning for metastatic melanoma. Cutis. 2007;80:423–6.
9. Hristov AC, High WA, Golitz LE. Localized cutaneous argyria. J Am Acad Dermatol. 2011;65:660–1.
10. Ubach P, Caversaccio M. Images in clinical medicine. Amalgam tattoo. N Engl J Med. 2011;364:e29.
11. Rongioletti F, Robert E, Buffa P, Bertagno R, Rebora A. Blue nevi-like dotted occupational argyria. J Am Acad Dermatol. 1992;27:1015–6.

J. Garcias-Ladaria,* P. Hernandez-Bel, J.L. Torregrosa-Calatayud, A. Martínez-Aparicio

*Corresponding author.
E-mail address: jgarcila@gmail.com (J. Garcias-Ladaria).

New Perspectives in the Treatment of Leg Ulcers☆

Nuevas perspectivas en el tratamiento de úlceras en las piernas

To the Editor:

After carefully reading the comprehensive review article by Velasco[1] on the diagnosis and treatment of leg ulcers, we write to comment further on a new therapeutic option referred to by that author. Several studies have reported the positive effect on skin and mucosal healing of the activation of β-adrenergic receptors,[2–5] as the author of the above-mentioned review points out with a reference to the work of Margolis et al.[2] However, research in the field of wound healing is now focusing on the significant impact on the healing process of glucocorticoid (GC) activity.

The presence of high GC levels is associated with delayed cutaneous wound healing and barrier recovery after mechanical disruption.[6,7] The present group has shown the negative effect of GCs on epidermal differentiation and proliferation.[7] Using models based on exogenous GC administration or endogenous release secondary to psychological stress, several authors have demonstrated the inhibitory action of GCs on fibroblast proliferation.[6] In both models, systemic GC blockade improved wound healing and barrier recovery.

Because of the potential complications of systemic blockade of GC activity, current research on new treatments is focusing on both the blockade of GC receptors and on the activity of 11β-hydroxysteroid dehydrogenase-1 (11β-HSD1), the enzyme responsible for the peripheral conversion of cortisone to its active form cortisol.[6,8,9]

Given the high levels of GC observed in diabetic patients and the recent suggestion of a possible association between GC activity and systemic complications in diabetes mellitus,[6] topical treatments that block such activity would appear to be a promising therapeutic tool in wound healing. The dermatological application of such topical treatments could therefore be very useful in the treatment of leg ulcers. This is a field in which, as Velasco has pointed out[1], dermatologists should play a greater role.

Acknowledgements

ISDIN S.A. provided support as a postdoctoral fellow for Elena Godoy Gijón. Mrs. Joan Wakefield provided invaluable editorial assistance.

☆ Please cite this article as: Godoy-Gijón E. New Perspectives in the Treatment of Leg Ulcers. Actas Dermosifiliogr. 2013;104:254–5.

References

1. Velasco M. Aspectos diagnósticos y terapéuticos de las úlceras de las piernas. Actas Dermosifiliogr. 2011;102:780–90.
2. Margolis DJ, Hoffstad O, Isseroff RR. Association between the use of beta-adrenergic receptor agents and the development of venous leg ulcers. Arch Dermatol. 2007;143:1275–80.
3. Pullar CE, Rizzo A, Isseroff RR. Beta-adrenergic receptor antagonists accelerate skin wound healing: evidence for a catecholamine synthesis network in the epidermis. J Biol Chem. 2006;281:21225–35.
4. Sivamani RK, Pullar CE, Griffths B, Isseroff RR. Beta-2-adrenergic receptor blockade accelerates burn wound healing. J Invest Dermatol. 2006;126:59.
5. Steenhuis P, Huntley RE, Gurenko Z, Yin L, Dale BA, Fazel N, et al. Adrenergic signaling in human oral keratinocytes and wound repair. J Dent Res. 2011;90:186–92.
6. Vukelic S, Stojadinovic O, Pastar I, Vouthounis C, Krzyzanowska A, Das S, et al. Farnesyl pyrophosphate inhibits epithelialization and wound healing through the glucocorticoid receptor. J Biol Chem. 2010;285:1980–8.
7. Choi EH, Demerjian M, Crumrine D, Brown BE, Mauro Th, Elias PM, et al. Glucocortid blockade reverses psychological stress-induced abnormalities in epidermal structure and function. Am J Physiol Regul Integr Comp Physiol. 2006;291: R1657–62.
8. Terao M, Murota H, Kimura A, Kato A, Ishikawa A, Igawa K, et al. 11β-Hydroxysteroid dehydrogenase-1 is a novel regulator of skin homeostasis and a candidate target for promoting tissue repair. PLoS One. 2011;6:e25039.
9. Pérez P. Glucocorticoid receptors, epidermal homeostasis and hair follicle differentiation. Dermatoendocrinology. 2011;3:166–74.

E. Godoy-Gijón[a,*] M. Qiang Man[b] J.P. Thyssen[c] P.M. Elias[c]

[a] *Servicio de Dermatología, Hospital de Cabueñes, Gijón, Spain*
[b] *Dermatology Service, Veterans Affairs Medical Center, and Department of Dermatology, University of California, San Francisco, USA*
[c] *National Allergy Research Centre, Department of Dermato-Allergology, Copenhagen University Hospital Gentofte, Copenhagen, Denmark*

* Corresponding author.
E-mail address: e.godoy.gijon@gmail.com
(E. Godoy-Gijón).

Radiodermatitis with Signs of Eccrine Squamous Syringometaplasia Following a Diagnostic Procedure☆

Radiodermitis secundaria a procedimiento diagnóstico con signos de siringometaplasia escamosa ecrina

To the Editor:

Eccrine squamous syringometaplasia (ESS) is a squamous metaplasia of the cuboidal cells of the of the eccrine sweat ducts. ESS is considered a nonspecific reactive response to exposure to toxic agents and drugs but has also been described following cutaneous processes, such as tumors, infections and inflammatory conditions, such as pyoderma gangrenosum, phytophotodermatitis, and chronic ulcers.[1–4]

We report a peculiar case of radiodermatitis with the unusual histopathologic finding of ESS.

The patient was a 62-year-old man who reported the appearance of an itchy erythematous plaque on the right side of his back. The plaque had developed 15 days earlier. His medical history included metabolic syndrome, hyperuricemia, and chronic ischemic heart disease. The patient was receiving regular treatment with atorvastatin, allopurinol, enalapril, isosorbide, carvedilol, ticlopidine, sitagliptin, and metformin. In the previous 2 months, he had undergone a diagnostic coronary angiography and 2 angioplasties.

Physical examination revealed a square-shaped erythematous plaque (9 × 12 cm) with well-defined borders and an eroded center (Fig. 1). The location coincided with one of the sites irradiated when the patient received a total dose of 7.8 Gy in 3 separate procedures. Histopathology demonstrated hyperkeratosis, irregular acanthosis and dysmaturation of the epidermis, a moderate predominantly neutrophilic perieccrine inflammatory infiltrate in the dermis, and squamous metaplasia of both eccrine coil and duct (Fig. 2). These findings were compatible with ESS.

The radiodermatitis plaque responded favorably to local treatments and topical corticosteroids. At the time of writing, only slight residual hyperpigmentation persisted.

The frequency of radiodermatitis caused by coronary procedures is not known but is thought to be increasing due

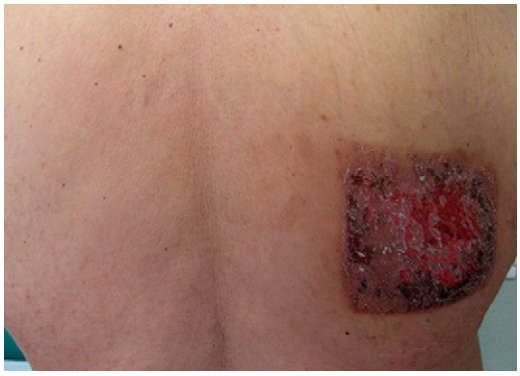

Figure 1 Erythematous plaque with an ulcerated center on the right side of the back.

☆ Please cite this article as: Concha Garzón MJ, et al. Radiodermitis secundaria a procedimiento diagnóstico con signos de siringometaplasia escamosa ecrina. Actas Dermosifiliogr. 2013;104:255–7.