M.M. Escudero-Góngora,[a,*] L.J. del Pozo-Hernando,[a] O. Corral-Magaña,[a] E. Antón[b]

[a] *Servicio de Dermatología, Hospital Universitario Son Espases, Palma de Mallorca, España*
[b] *Servicio de Anatomía Patológica, Hospital Universitario Son Espases, Palma de Mallorca, España*

* Corresponding author.
E-mail address: mmarescudero88@gmail.com (M.M. Escudero-Góngora).
1578-2190/

Alopecia Areata and Palmoplantar Pustulosis: Report of 4 Cases☆

Alopecia areata y pustulosis palmoplantar: informe de 4 casos

To the Editor:

To date, reports on alopecia in patients with palmoplantar pustulosis (PPP) are rarely seen. We herein describe four cases of alopecia in patients with PPP.

During these 10 years, we diagnosed 128 patients with PPP (M:F=1:2) in our department. Among these patients, four patients had PPP and alopecia (3.1%). All of the patients were female, and the age range was from 39 to 56 years old (Table 1). Three patients developed alopecia prior to the onset of PPP, and the remaining patient developed alopecia 10 years after the onset of PPP. Two patients had pustulotic arthro-osteitis. Two patients were smokers, and one was a passive smoker. A metal patch test was carried out in all cases. Three patients showed no reaction, while one patient showed a positive reaction (+) to zinc according to the criteria of the International Contact Dermatitis Research Group. Regarding the type of alopecia, all patients presented with alopecia areata multiplex. Severe types of alopecia involving sites other than the scalp, such as the eyelashes and eyebrows, were not observed. Representative figures are shown in Fig. 1. Laboratory examination did not reveal positive antinuclear antibodies and thyroid abnormalities. Examination of focal infection was performed in all cases, in which dental caries and tonsil hypertrophy were observed each in one case. All cases were conservatively treated for alopecia. Topical immunotherapy with squaric acid dibutylester (SADBE) was applied in one case (Case 1), while the other cases were treated with topical corticosteroid or carpronium chloride lotion. Among four patients, Case 1 was resistant while others were relatively responsive to topical therapies for alopecia.

Thyroiditis, diabetes mellitus, hyperlipidaemia, and psychiatric disorders are sometimes accompanied by PPP. By contrast, There is a limited number of reports on autoimmune skin disorders such as vitiligo and alopecia. Previously, Nakamura et al. reported a patient with PPP, alopecia totalis and Hashimoto's thyroiditis.[1] In their case, the alopecia was severe with involvement of the total scalp, eyebrow, and eyelashes, suggesting immunological interplay among PPP, alopecia, and thyroid disorders. By contrast, our four patients showed a common type of alopecia areata multiplex. Both alopecia and PPP are occasionally associated with autoimmune thyroiditis; however, autoimmune thyroiditis was not detected in any of our patients.

Similar to psoriasis, IL-23/IL-17 inflammatory pathway has recently been suggested to be important in PPP. IL-17 and IL-22 are detected close to or in the acrosyringium of PPP skin lesions, and increased serum levels of both cytokines.[2] The etiology of alopecia areata is complicated, and recent studies have suggested Th1 dominance, Th2 dominance, and Th17 involvement.[3,4] It is known that psoriasis and alopecia mutually exert exclusive local effects, *e.g.* the protective effect of psoriatic lesions against hair loss.[5] This Renbök phenomenon is speculated to occur due to a local balance of different Th1/Th2/Th17 subsets which amplify self-sustaining cytokines while suppressing alternative pathways. Most likely, the immune balance may depend on the disease stages, such as initial and progressive phases, or associated diseases such as atopic dermatitis, autoimmune diseases, and connective tissue

Table 1 Characteristics of four patients with PPP and alopecia areata.

Case/Age/Sex	Smoking	Type of alopecia	Precedence	Metal Allergy	Focal infection
1/54/F	+	Areata multiplex	Alopecia	–	Dental caries
2/39/F	+	Areata multiplex	Alopecia	–	–
3/56/F	–	Areata multiplex	Alopecia	Zink	Tonsil hypertrophy
4/44/F	Passive smoker	Areata multiplex	PPP	–	–

F: female; PPP: palmoplantar pustulosis

☆ Please cite this article as: Hiraiwa T, Yamamoto T. Alopecia areata y pustulosis palmoplantar: informe de 4 casos. Actas Dermosifiliogr. 2018;109:751–752.

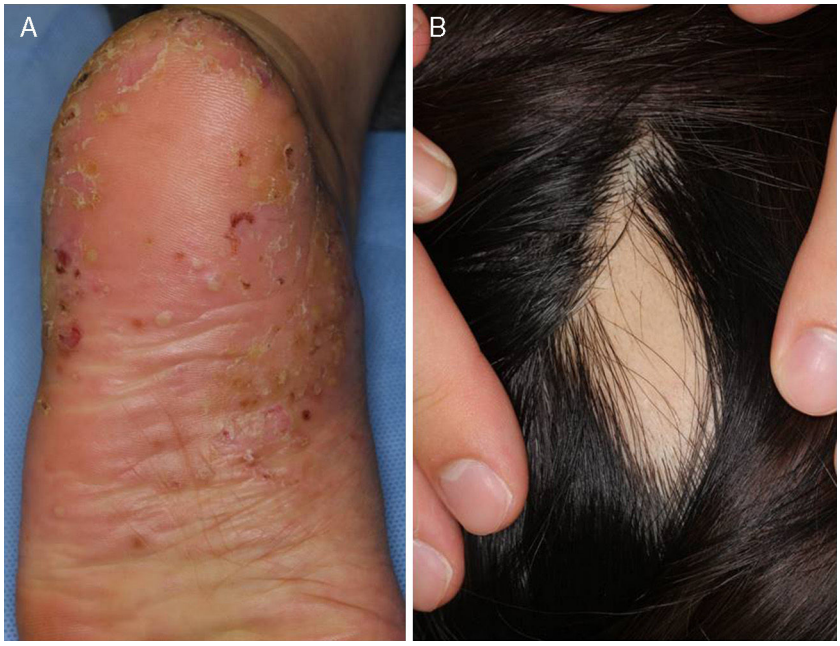

Figure 1 Representative figures are shown. Case 2 presented with plantar lesion of PPP (a) and alopecia areata (b).

disorders. In conclusion, alopecia associated with PPP may be overlooked, and thus more attention should be paid to alopecia in the clinical examination of PPP.

References

1. Nakamura E, Yamamoto T, Satoh T, Nishioka K. Local recurrence of adult Spitz nevus. J Dermatol. 2004;31:353–5.
2. Murakami M, Hagforsen E, Morhenn V, Ishida-Yamamoto A, Iizuka H. Patients with palmoplantar pustulosis have increased IL-17 and IL-22 levels both in the lesion and serum. Exp Dermatol. 2011;20:845–7.
3. Giordano CN, Sinha AA. Cytokine pathways and interactions in alopecia areata. Eur J Dermatol. 2013;23:308–18.
4. Suárez-Fariñas M, Ungar B, Noda S, Shroff A, Mansouri Y, Fuentes-Duculan J, et al. Alopecia areata profiling shows T_H1. T_H2, and IL-23 cytokine activation without parallel T_H17/T_H22 skewing. J Allergy Clin Immunol. 2015;136:1277–87.
5. Happle R, van der Steen P, Perret C. The Renbök phenomenon: An inverse Köbner reaction observed in alopecia areata. Eur J Dermatol. 1991;1:228–30.

T. Hiraiwa, T. Yamamoto*

Unidad de Dermatología, Facultad de Medicina, Universidad de Fukushima, Fukushima, Japón

* Corresponding author.
E-mail address: toyamade@fmu.ac.jp (T. Yamamoto).
1578-2190/

Complete Spontaneous Regression of the Primary Tumor in Merkel Cell Carcinoma☆

Regresión completa espontánea del tumor primario en el carcinoma de células de Merkel

To the Editor:

Merkel cell carcinoma (MCC) is a particularly aggressive tumor whose incidence has grown significantly in recent decades.[1–3] Approximately 80% of MCCs contain Merkel cell polyomavirus, which was discovered in 2008.[4] Although MCC is an aggressive tumor, about 40 cases of spontaneous regression have been described to date.[5,6] We report on 2 patients who experienced complete regression of MCC after biopsy.

The first patient was a 69-year-old man with a history of hypertension and type 2 diabetes mellitus. Four months before being seen at our unit, he developed a fast-growing polylobulated nodular lesion with a diameter of 3 cm in the parietal region. He also had 2 papules indicative of satellite metastases that measured 4 to 5 mm and were located in the right parietal region, about 3 to 4 cm from the primary tumor (Fig. 1A). Biopsy showed a proliferation of basophilic cells that stained positive for synaptophysin and negative for cytokeratin 20. Merkel cell polyomavirus was detected by polymerase chain reaction. A primary neuroendocrine tumor involving the internal organs was ruled out and despite the negative staining for cytokeratin 20, a diagnosis of primary

☆ Please cite this article as: Marcoval J, Valentí-Medina F, Penín RM, Bermejo J. Regresión completa espontánea del tumor primario en el carcinoma de células de Merkel. Actas Dermosifiliogr. 2018;109:752–754.