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Dermoscopy of multiple warty dyskeratomas

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Introduction

Warty dyskeratoma (WD), also known as isolated follicular dyskeratosis, is a relatively uncommon benign epidermal proliferation first reported by Szymanski in 1957 [1]. WD presents as a whitish or grayish solitary papule or as a small nodule with a keratotic plug, usually limited to the head and neck of middle-aged patients. Lesions are generally solitary, but grouped verrucous papules on the scalp have been reported [2]. Oral and genital mucosa involvement has been described [3]. The dermoscopic aspect of WD has been recently reported as a pale homogeneous area with brown to yellow marbled clods [4]. The pathogenesis of WD is unclear. The common histopathologic finding is the presence of focal acantholysis and dyskeratosis [5]. We present a case of a 59-year-old male patient with multiple warty dyskeratomas located on the back, in which dermoscopy was helpful in clinical diagnosis.

Case Report

A 59-year-old male patient was referred to our unit for evaluation because of a history of multiple basal cell carcinomas. On clinical examination, multiple grayish-brownish papules with central keratin plugs were observed on the back (Figure 1a); similar lesions were not detected on the head and neck, and the oral mucosa was uninvolved. Sun damage and lentiginosis was observed in photo-exposed areas. The patient was unaware of these lesions since they were asymptomatic. No familial history of relevant skin conditions was reported.

Dermoscopy revealed a similar appearance in each of the observed lesions, composed of a round homogeneous grayish area with multiple structureless brown round and irregularly shaped central clods that corresponded to keratotic plugs, separated by white areas or septum. Some linear vascular vessels with no specific morphology or arrangement were noted at the periphery of the lesions (Figure 1b-e).

Four lesions were selected for excision. Histopathology revealed an endo-exophytic cup-shaped lesion with a well-circumscribed invagination of epidermis consisting of epithelial proliferation covered by a parakeratotic plug (Figure 2a) with prominent dyskeratosis and acantholysis (Figure 2b). Histopathology of all four lesions was consistent with warty dyskeratomas.

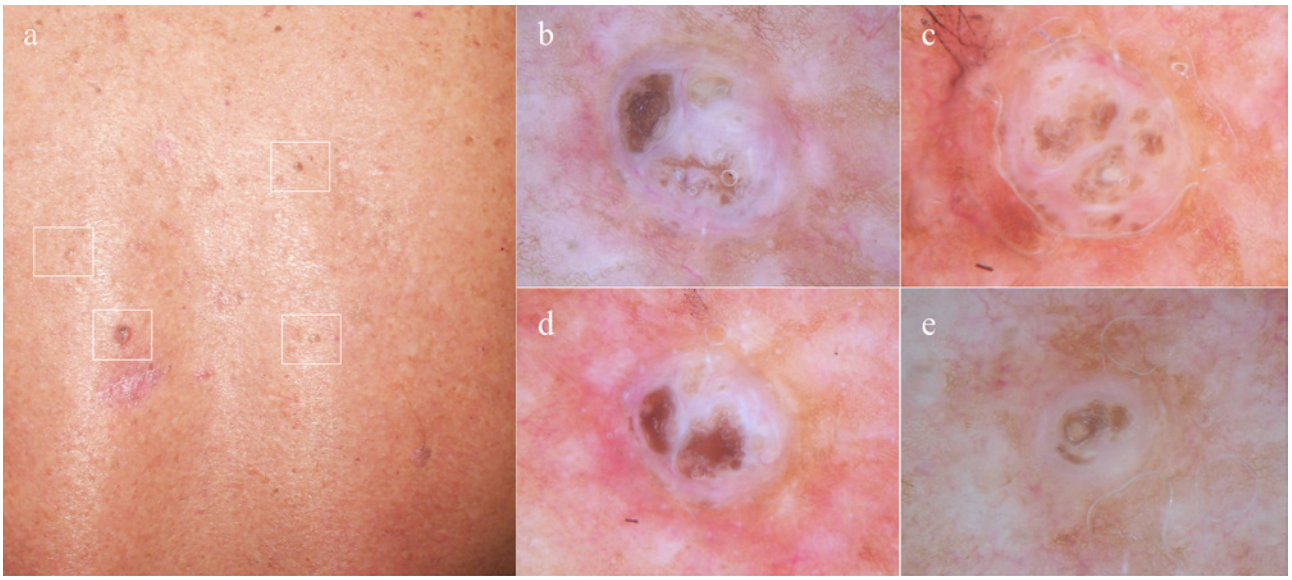

Figure 1. Clinical examination revealed multiple grayish-brownish papules with central keratin plugs (a). In the evaluated lesions, dermoscopy showed a pattern composed of a round homogeneous grayish area with multiple structureless brown to yellow round and irregularly shaped central clods (b-e). [Copyright: ©2017 Salerni et al.]

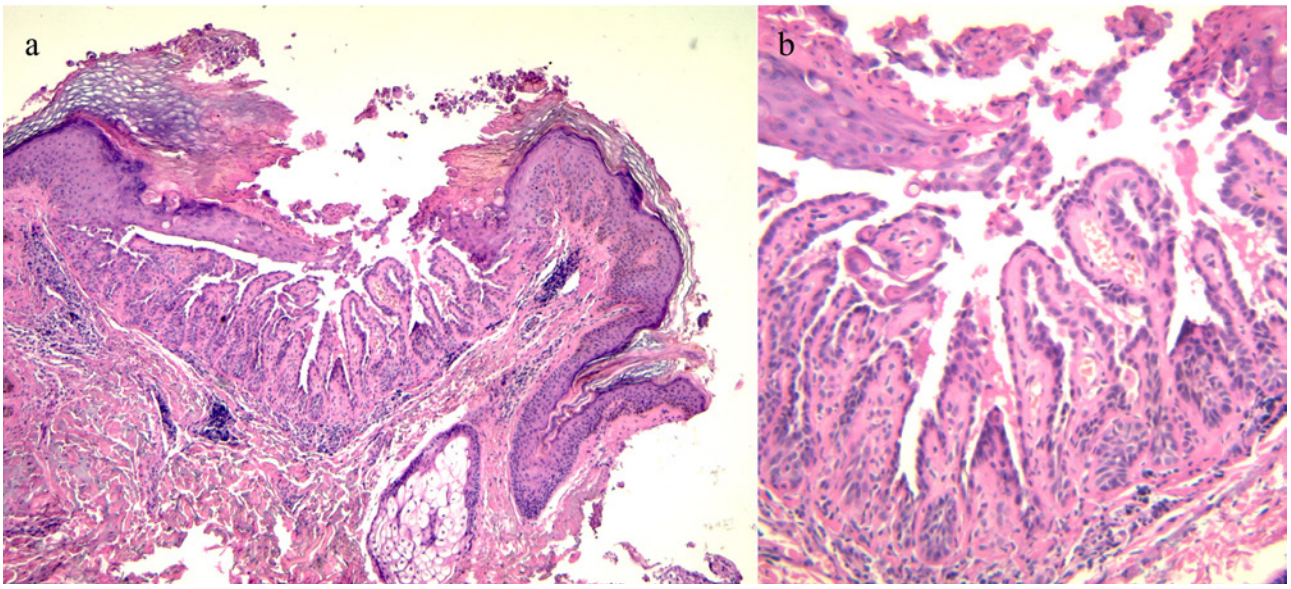

Figure 2. Endo-exophytic cup-shaped lesion displaying a well-circumscribed invagination of epidermis consisted of epithelial proliferation covered by a parakeratotic plug (Figure 2a, HE x40). Prominent dyskeratosis and acantholysis is observed (Figure 2b, HE x100). [Copyright: ©2017 Salerni et al.]

Discussion

The pathogenesis of WD is unclear. It represents a sporadic localized error in epithelial maturation and cohesiveness. Even though WD was originally referred to as isolated keratosis follicularis, there is no evidence that patients with a WD carry germline mutations in ATP2A2, the gene responsible for Darier disease. It has been suggested a range of exogenous factors or an infectious viral agent may be involved, but these assumptions have not been confirmed [6].

The common histopathologic denominator is the presence of focal acantholysis and dyskeratosis [5]. The pathologic process is that of a well-circumscribed endophytic or endo-exophytic epithelial proliferation of benign squamous cells (which distinguish it from other acantholytic and dyskeratotic disorders) demonstrating elongated dermal papillae with suprabasilar acantholysis and dyskeratosis. A central keratin-filled invagination may be identified. The lesion can sometimes be seen originating from a hair follicle or sebaceous gland.

The dermoscopic findings detected in WD are similar to those of other acantholytic and dyskeratotic disorders, including acantholytic dyskeratotic acanthoma, vemurafenib-induced acantholytic dyskeratosis and Grover's disease; such data is easily explained by their related histopathological

basis. In the latter group, the papules display a central yellowish to brown star-like pattern overlying a pinkish homogeneous structureless area that is otherwise not detectable at clinical examination [7,8]. In our case, the keratin plug did not show the star-like pattern described, but a pattern composed of multiple brownish round and irregularly shaped central clods, as reported in the original description of the dermoscopy of WD [4].

Histopathology remains the gold standard for diagnosis, but dermoscopy can be useful to improve clinical recognition. Further studies are needed to confirm our preliminary observations.

References

1. Szymanski FJ. Warty dyskeratoma: a benign cutaneous tumor resembling Darier's disease microscopically. *Arch Dermatol.* 1957;75:567-72.
2. Griffiths TW, Hashimoto K, Sharata HH, Ellis CN. Multiple warty dyskeratomas of the scalp. *Clin Exp Dermatol.* 1997 Jul;22(4):189-91.
3. Laskaris G ,Sklavounou A. Warty dyskeratoma of the oral mucosa. *Br J Oral Maxillofac Surg.* 1985 Oct;23(5):371-375.
4. Lencastre A, Campos S, Cabete J. Warty dyskeratoma. *J Am Acad Dermatol.* 2016 Sep;75(3):e97-e98.
5. Kaugars GE, Lieb RJ, Abbey LM. Focal oral warty dyskeratoma. *Int J Dermatol.* 1984;23:123-130.
6. Kaddu S, Dong H, Mayer G, Kerl H, Cerroni L. Warty dyskeratoma--"follicular dyskeratoma": analysis of clinicopathologic features of a distinctive follicular adnexal neoplasm. *J Am Acad Dermatol.* 2002 Sep;47(3):423-428.
7. Specchio F, Argenziano G, Tiodorovic-Zivkovic D, et al. Dermoscopic clues to diagnose acantholytic dyskeratosis. *Dermatol Pract Concept.* 2015 Jan 30;5(1):59-60.
8. de Abreu L, Guimarães Cordeiro NG, Buçard AM, Quintella DC, Argenziano G. Dermoscopy of Grover disease. *J Am Acad Dermatol.* 2017 Feb;76(2S1):S60-S63.