Dermatology 2008;217:21–22
DOI: 10.1159/000118509

Dermoscopic Features of Pearly Penile Papules

Masahiko Ozeki, Reiko Saito, Masaru Tanaka

Department of Dermatology, Tokyo Women's Medical
University Medical Center East, Tokyo, Japan

Key Words

Pearly penile papules • Condyloma acuminatum • Penis

Case Report

A 37-year-old Japanese man presented at our clinic with a 1-year history of small white papules on the corona of the penis. He feared that these papules were caused by a sexually transmitted disease. These papules were papillomatous in shape. They were oriented in a few rows on the corona and were about 1 mm in width and length (fig. 1a). Dermoscopic examination demonstrated a whitish pink cobblestone or grape-like appearance in a few rows with central dotted or comma-like vessels in each papule (fig. 1b). The papules were further surrounded by crescent-shaped whitish structures. There was no irregular reflection suggesting desquamation, which is often seen in warts. We suspected these papules of pearly penile papules and biopsied.

Histopathological examination of the biopsy disclosed the following findings (fig. 1c). The epidermis showed orthokeratosis and mild acanthosis with focally elongated rete ridges. Collagen fibers in the dermis were only slightly increased. Ectatic capillaries and venules were a prominent feature of the hyperplastic papillary dermis. A sparse infiltrate of lymphocytes and histiocytes was present in the dermis. These findings conformed to the histopathological features of angiofibroma. There was no pathological finding of condyloma acuminatum.

Discussion

The diagnosis of pearly penile papules was established. The condition was explained to the patient as being benign and of noncontagious nature. Lesions similar to pearly penile papules were described as early as 1700 by Littre [1]. The term 'pearly penile papules' was coined by Johnson and Baxter [2]. Pearly penile papules share histological features with angiofibroma. But many of these patients fear that these papules are caused by a sexually transmitted disease. They find the most reassurance in being told that these papules are neither sexually transmitted nor malignant tumors. A precise diagnosis has been needed. We propose the useful additional tool dermoscopy for the diagnosis of pearly penile papules. Although dermoscopic features of nonpigmented skin lesions are seldom reported, dermoscopy might be useful in assessing pathological features in the upper dermis, such as fibrosis, cysts and blood vessels in nonpigmented skin lesions. Recently reports on the dermoscopic features of nonpigmented lesions

Fig. 1. **a** Small white papules are oriented in a few rows on the corona of the penis. **b** Whitish pink cobblestone appearance in a few rows with central dotted or comma-like vessels in each papule. The papules are further surrounded by whitish crescent-shaped rims. **c** Prominent structures of hyperplastic papillary dermis and dilatation of vascular spaces. The epidermis shows mild acanthosis with orthokeratosis.

have increased gradually [3]. Moreover dermoscopy is a noninvasive tool. Dermoscopy has been reported to be noninfectious. The routine use of dermoscopes is unproblematic, and furthermore either oil or isopropyl alcohol as contact medium for dermoscopes is not associated with the transmission of pathogenic germs [4]. We can use dermoscopy safely for the differential diagnosis of lesions including transmitted diseases. In this report, we have shown the characteristic dermoscopic features of whitish pink cobblestone appearance in a few rows with central vessel structures surrounded by crescent-shaped rims, and they correspond to the pathological findings of a hyperplastic papillary dermis, dilatation of vascular spaces and mild acanthosis with orthokeratosis, respectively. Central dotted or comma-like vessels are similar to those seen in seborrheic keratosis, clear-cell acanthoma, dermal nevus or viral warts [3]. The whitish pink appearance with vessels is slightly similar to that in a part of juvenile xanthogranuloma [5]. The whitish pink cobblestone appearance in a few rows is characteristic. To our knowledge this dermoscopic feature has not been described in pearly penile papules. Dermoscopic examination seemed useful as an adjunct to the diagnosis of these papules on the corona of the penis. Pearly penile papules could be diagnosed precisely by this noninvasive tool, and these patients may be relieved from their fear of having a sexually transmitted disease without invasive excision biopsies. Understanding the dermoscopic features of pearly penile papules thus prevents hazardous and unwanted treatment.

We here report the first experience with the dermoscopic features of pearly penile papules. Evaluations of various skin lesions using dermoscopy would be useful in the daily dermatology practice.

References

- 1 Neinstein LS, Goldenring J: Pink pearly penile papules: an epidemiologic study. *J Pediatr* 1984;105:594–595.
- 2 Johnson BL, Baxter DL: Pearly penile papules. *Arch Dermatol* 1964;90:166–167.
- 3 Zalaudek I, Argenziano G, Di Stefani A, et al: Dermoscopy in general dermatology. *Dermatology* 2006;212:7–18.
- 4 Häusermann P, Widmer A, Itin P: Dermatoscope as vector for transmissible diseases – no apparent risk of nosocomial infections in outpatients. *Dermatology* 2006;212:27–30.
- 5 Palmer A, Bowling J: Dermoscopic appearance of juvenile xanthogranuloma. *Dermatology* 2007;215:256–259.

Masahiko Ozeki
 Department of Dermatology
 Tokyo Women's Medical University Medical Center East
 2-1-10, Nishi-Ogu, Arakawa-ku
 Tokyo 116-8567 (Japan)
 Tel. +81 3 3810 1111, Fax +81 3 3894 1441
 E-Mail zekkie@yd6.so-net.ne.jp