

Case Report

Lichen planus like keratosis: little known and misleading etiology of pigmented skin lesion

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ABSTRACT

Benign lichenoid keratosis is a rarely described entity in the literature. It is believed to correspond to a process of clearance of a solar lentigo or a seborrheic keratosis that must be confirmed on histology. The clinical and dermoscopic presentations are very variable from one subject to another and according to the stage of progression. In our case, its localization on the umbilicus with a grayish-black clinical aspect and a doubtful dermoscopy is not only original, but led us to wrongly think of a malignant tumor and to perform an anatomopathological examination that helped to re-establish the diagnosis.

Keywords: Lichen planus like keratosis, Lichenoid benign keratosis, Umbilicus, Dermoscopy, Dermatopathology, Black skin tumor

INTRODUCTION

A pigmented skin lesion may be due to either benign or malignant proliferation of melanocytic cells or to the presence of a deposit of melanin, coagulated blood or oxidized keratin in a non-melanocytic lesion. Malignant tumors and more particularly melanoma remain the greatest fear and must be ruled out with the help of dermoscopy. Unfortunately, sometimes it can be misleading, and make us think wrongly of a malignant pathology as in our case.

CASE REPORT

A 30-year-old patient, with no medical history, consults for a hyperpigmented umbilical lesion that has been evolving for 9 months, totally asymptomatic and without any other associated symptoms. Clinical examination revealed a patient of skin phototype IV, a nodular lesion of heterogeneous greyish-brown color, scaly, not well

bordered, measuring approximately 1 cm of large axis, located on the umbilicus and two small satellite lesions slightly infiltrated and somewhat hyperpigmented (Figure 1). Dermoscopy showed several blue-gray fine dots and globules, a keratinized center with a gray-blue pseudo-veil (Figure 2).

A skin biopsy was immediately performed with an anatomopathological study demonstrating a papillomatous acanthotic epidermis overlaid by a very thick keratin layer. In the superficial dermis, there is a mononuclear inflammatory infiltrate arranged in a band that nibbles at the basal lamina with numerous apoptotic bodies. Pigmentary incontinence, spongiosis and corneal cysts are also seen (Figure 3).

The diagnosis of lichen planus like keratosis (LPLK) was retained. A therapeutic abstention was decided and an appointment for control was given.



Figure 1: Pigmented and scaly nodule on the umbilicus with two small satellite lesions.



Figure 2: Dermoscopic image showing peripheral blue-gray dots and globules and a keratinized center with a gray-blue pseudo-veil and black structureless areas.

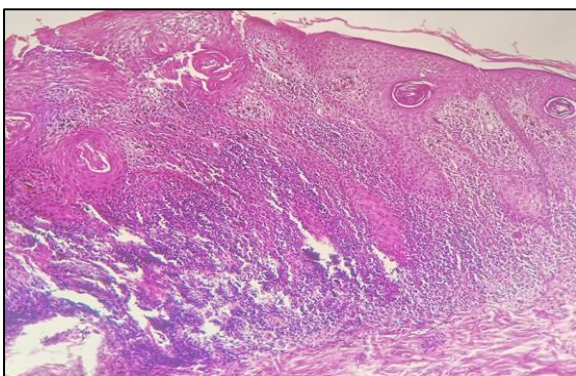


Figure 3: Histological section showing a papillomatous acanthotic epidermis, a mononuclear inflammatory infiltrate arranged in a band that nibbles at the basal lamina with numerous apoptotic bodies, a pigmentary incontinence and corneal cysts. (Hematoxylin eosin stain).

DISCUSSION

LPLK also known as benign lichenoid keratosis, is a common benign lesion that is of great relevance when it is mistakenly diagnosed as a malignant lesion such as basal cell carcinoma or melanoma.¹ It is believed to be an inflammatory process intended to clear residual seborrheic keratosis or solar lentigo that often disappears spontaneously within 3 to 18 months.^{2,3} To support this diagnosis, evidence of the initial lesion disappearing is required, including the presence of remnant histological features in favor of seborrheic keratosis or solar lentigo.^{4,5}

In a recent study, Ansari et al described different clinical presentations. The pigmented macular form was the most frequently found.⁶ Dermoscopically, several patterns can be seen. In the pigmented forms, stereotypical dermoscopic findings are brown-grayish granules which may cluster and form globules, rhomboidal structures or stripes. A remaining part of the preexisting seborrheic keratosis can also be found guiding then the diagnosis.⁷ However, Watanabe et al reportedly identified dermoscopic changes according to lesion chronology in a small-sized study of 17 LPLK. Initially there would be a light brown pseudo-network due in particular to the residual primary lesion, as well as overlapping pinkish areas explained by lichenoid inflammation. During the regression phase, annular granular structures and gray pseudo-network seemed to be main dermoscopic features; Finally, during the late regression stage, diffuse fine gray-blue dots are observed.⁸ Some of these dermoscopic patterns may be misleading, which justifies a biopsy with a histological study for any suspicious lesion.

The lesion is most often found on the face, trunk or limbs.⁶ To our knowledge, lichenoid keratosis of the umbilicus has not been described previously and is therefore an exceptional location. The umbilicus is a complex anatomical structure, that can be the elective site of inflammatory and infectious dermatoses as well as tumors or malformations. There are various etiologies of a hyperpigmented umbilical lesion. In adults, sister Mary Joseph's nodule is the first diagnosis discussed and feared. These skin metastasis with a poor prognosis are most often secondary to gastric adenocarcinoma in men and ovarian cancer in women. Clinically, the sister Mary Joseph nodule is firm, irregular, blue-purple or brownish-red and may ulcerate subsequently.⁹ Melanoma or squamous cell carcinoma may also be suspected, especially when dermoscopy is favorable. Benign tumors, including omphaloliths, seborrheic keratoses, dermal nevi, hypertrophic and keloid scars, dermatofibromas, epidermal cysts and warts, should also be considered in adults; while botriomycoma is to be considered first in the pediatric population.¹⁰

CONCLUSION

LPLK is a diagnosis that should be considered in the presence of a pigmented lesion. However, given the great

variability of the clinical and dermoscopic presentations, which are sometimes confusing, a histological study must be performed to rule out a malignant lesion.

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