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Regressing Seborrheic Keratosis – Clinically and Dermoscopically Mimicking a Regressing Melanoma

Zrinjka Paštar[1], Jasna Lipozenčić[2], Jaka Radoš[2], Gordana Štajminger[3]

[1]Health Department, Ministry of Defense, Republic of Croatia; [2]University Department of Dermatology and Venereology, Zagreb University Hospital Center; [3]Private Clinic for Internal Medicine "Dr. Gordana Štajminger", Opatička 8, Zagreb, Croatia

Corresponding author:
Zrinjka Paštar, MD
Health Department, Ministry of Defense
Čerinina 23
HR-10000 Zagreb
Croatia
zpastar@hi.htnet.hr

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SUMMARY The diagnosis of seborrheic keratosis is a clinical diagnosis. In a certain percentage of cases, differential diagnosis between seborrheic keratosis and malignant melanoma is difficult. We describe a case of regressing seborrheic keratosis simulating malignant melanoma. Clinical, dermoscopic and histopathologic examinations were performed for the occurrence of an asymmetric, irregularly demarcated, irregularly pigmented lesion measuring 1.3 x 1.5 cm on the right part of the abdomen in a 76-year-old male Caucasian. In order not to miss melanoma, the excision and histopathologic examination of the lesion with peppering is essential.

KEY WORDS: regressing seborrheic keratosis, regressing melanoma, dermoscopy

INTRODUCTION

Dermoscopy is a simple, noninvasive, *in vivo* method improving the sensitivity and specificity of clinical diagnosis of pigmented skin lesions. The first step of dermoscopic pattern analysis is to differentiate melanocytic from nonmelanocytic lesions (1,2). Diagnosis of seborrheic keratosis (SK) is a clinical diagnosis but in a certain percentage of cases, differential diagnosis between SK and malignant melanoma is difficult. The most important dermoscopic criteria for SK are comedo-like pseudofollicular openings and horn pseudocysts (3-5). Flat SK on the face shows pseudopigmented network formed by follicular openings but asymmetric follicular openings are not seen (3).

However, in some cases, there are overlapping dermoscopic features that may present significant pitfall in differentiation of melanocytic lesions from nonmelanocytic lesions (6).

We report on a case of a completely regressing seborrheic keratosis (RSK) simulating melanoma.

CASE REPORT

We report on a 76-year-old man with a history of numerous SKs and two basal cell carcinomas, who presented with a pigmented suspect lesion on the right part of the abdomen without a known history of duration. Clinically, on the right part of the abdomen there was an asymmetric, irregularly demarcated, irregularly pigmented lesion measuring 1.3 x1.5 cm. On the right part of the lesion, there was a slightly elevated dark brown area. Centrally and on the left part of the lesion there were light, dark brown and white-bluish areas (Fig. 1).

From the clinical point of view, the lesion appeared suspect as it complied with all the ABCDE criteria for the diagnosis of melanoma.

On dermoscopy, two distinctive parts were noticed (Fig. 2). In the right part of the lesion, numerous milia-like cysts on the background of brown diffuse pigmentation with brown-bluish peppering were seen. In the central and left part of the lesion a regressive area with brown-bluish peppering

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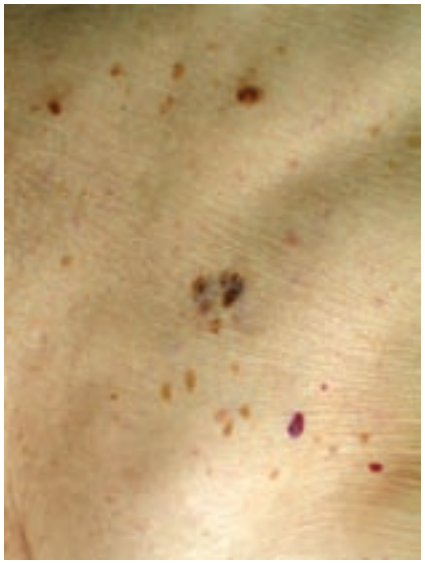

Figure 1. On the right part of the abdomen there was an asymmetric, irregularly demarcated, irregularly pigmented lesion measuring 1.3 x 1.5 cm. On the right part of the lesion there was a slightly elevated dark brown area. Centrally and on the left part of the lesion there were light, dark brown and white-bluish areas.

effect and brown diffuse pigmentation was seen. No comedo-like openings were observed in the lesion.

The patient was in good general health with hypertension in personal history. Physical examination revealed no lymphadenopathy. Ultrasonography of regional lymph nodes was within the normal limits.

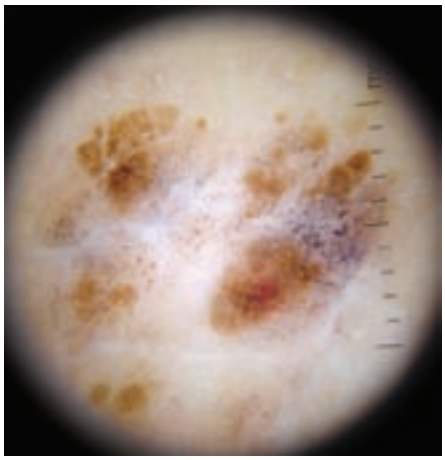

Figure 2. In the right part of the lesion, numerous milia-like cysts on a background of brown diffuse pigmentation with brown-bluish peppering were seen. In the central and left part of the lesion, a regressive area with brown-bluish peppering and brown diffuse pigmentation was seen.

As confident exclusion of regressing melanoma could not be made on the basis of both clinical and dermoscopy findings, the excision was done. Histopathologic examination revealed mild hyperkeratosis, acanthosis, proliferation of basaloid cells, slight melanocytic hyperplasia, abundant pigment in the basaloid cells, melanocytes engorged with melanin, and horn pseudocysts (Fig. 3). In the other part, atrophic epidermis, slight vacuolar degeneration of basaloid cells, scant melanophages, and mild lymphohistiocytic infiltration throughout the papillary dermis were observed (Figs. 4 and 5). Therefore, the diagnosis of completely RSK was made.

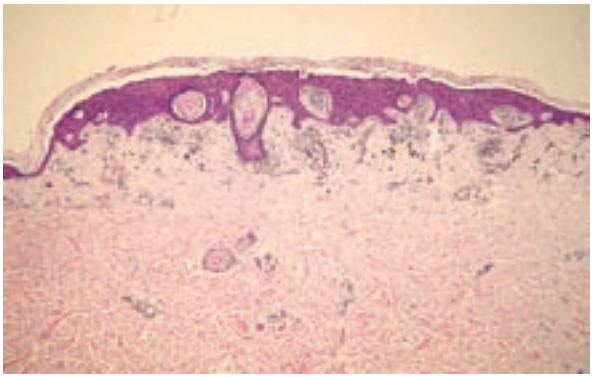

Figure 3. Mild hyperkeratosis, acanthosis, proliferation of basaloid cells, slight melanocytic hyperplasia, abundant pigment in the basaloid cells, melanocytes engorged with melanin and horn pseudocysts. (H&E staining, original magnification X40)

DISCUSSION

Clinically, SK is a simulator of melanoma (7,8). In our case, the dermoscopy finding of diffuse pigmentation and milia-like pseudocysts correlated histopathologically with abundant pigment in the basaloid cells, melanocytes engorged with melanin, acanthotic epidermis and intraepidermal keratin-filled cysts, while peppering effect correlated histopathologically with scant melanophages in papillary dermis. These scant melanophages were found equally throughout the lesion. The changes with brown-bluish peppering effect could be a lichen planus-like keratosis (LP-LK).

LP-LK is thought to be a regressing solar lentigo or seborrheic keratosis (9). Histologically, it represents a lichenoid reaction to a pre-existing solar lentigines or seborrheic keratosis. It is most commonly seen as a single lesion on the upper extremities, face and chest (3,9). It usually has a history of a preceding pigmented macule/plaque

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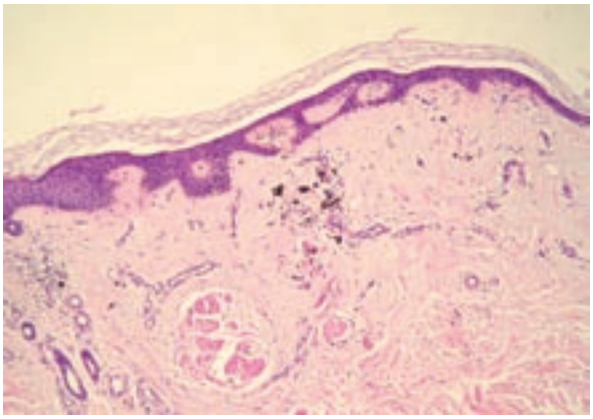

Figure 4. Atrophic epidermis, slight vacuolar degeneration of basaloid cells, scant melanophages and mild lymphohistiocytic infiltrate were seen symmetrically throughout the papillary dermis. (H&E staining, original magnification X40)

(solar lentigo or seborrheic keratosis), often rapidly changes, and is pruritic (with a range of other abnormal sensations) (9). A common dermoscopic presentation is an area of multiple blue-gray dots or peppering on a uniform tan background (9,10). Biopsy specimens in our case did not reveal a band-like infiltrate of mononuclear cells, therefore the diagnosis of LP-LK was rejected. Moreover, peppering is commonly seen in association with histological regression and therefore can be seen in any pigmented lesion (9). However, since regression may be a feature of malignant melanoma, the presence of peppering is a significant feature of invasive melanoma (9). On the other hand, in regressing melanoma one would expect residual tumor and abundant melanophages.

Therefore, the diagnosis of the completely RSK with peppering was established.

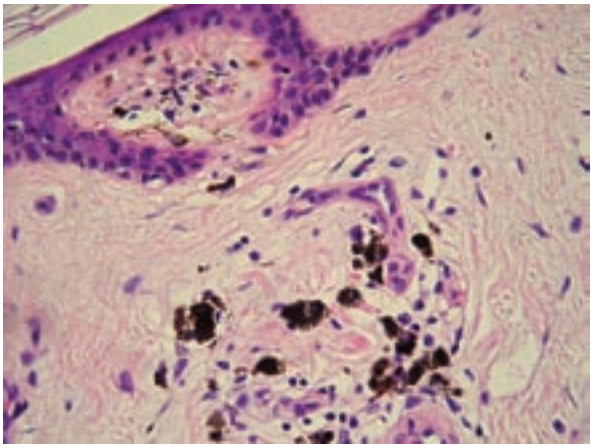

Figure 5. A detail from Figure 5. (H&E staining, original magnification X120)

CONCLUSION

We emphasize that peppering is a common dermoscopic finding in all pigmented lesions with regression including SK, LP-LK, and melanoma. Therefore, in order not to miss melanoma, excision and histopathologic examination of these lesions are essential.

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