

A Case of Vulvar Melanosis

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Genital melanosis is an acquired, irregular, brown to black discoloration of the glans or shaft of the penis, or of the vulva and vagina. Although genital melanosis seems similar to malignant melanoma clinically, the histologic findings of genital melanosis show basal layer hyperpigmentation with or without melanocytic hyperplasia and no atypia of the melanocytes.

**We report a rare case of genital melanosis ; a vulvar melanosis.
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Key Words : Genital melanosis, Vulvar melanosis

Genital melanosis, which is irregular, deep pigmented macules or patches occurring on the penile skin or the vulvar mucosal surfaces, can mimic melanoma^{1,4} and lentigines^{5,9}. These lesions of genital melanosis can be clinically differentiated from lentigines by their large size and border irregularity, and from melanoma by the lack of surface changes such as ulceration or palpability¹⁰.

The incidence of this disease is not known. A search of the literature disclosed few reports and follow-up of genital melanosis.

Despite its clinical resemblance to malignant melanoma, the histologic features are definitely benign showing intense pigmentation of the epidermis particularly in the basal layer. Melanocytes may be somewhat increased in number, and are arranged singly along the dermoepidermal junction. Genital melanosis occasionally shows markedly elongated dendrites extending up into the epidermis. However, there are no atypical histologic features like abnormal nuclei, or nests of melanocytes. The dermis appears normal except for many melanophages.

We report a rare case of genital melanosis ; a vulvar melanosis.

REPORT OF A CASE

A 42-year-old woman visited our clinic with a 3-year history of a mucosal lesion on her left labia minora. There was no history of drug intake, trauma, prior eruptions at that area, or family history of similar spots.

Physical examination revealed a bean-sized (10 × 15 mm) black patch on the inner side of the left labia minora (Fig. 1).

A biopsy specimen showed intense pigment deposition in the lower portion of the epidermis (Fig. 2). On Fontana-Masson stain, there was a marked melanocytic hyperplasia with elongated dendritic processes in the basal layer (Fig. 3).

DISCUSSION

The nomenclature of pigmented genital macules is confusing. Various terms including lentigo^{5,9}, melanotic macule¹¹⁻¹³, and melanosis^{2,4,9,14,15} were used.

The term lentigo which has been applied to solitary labial⁹ and penile macules^{5,6} is appropriate for the lesions with lentiginous melanocytic hyperplasia.

Melanotic macule is proper for pigmented macules primarily involving the labial or oral mucosal sites with basal layer hyperpigmentation, but there is no lentiginous melanocytic hyperplasia^{11,12}.

Melanosis may be applied to pigmented macules of the vulva^{4,16} and cervix^{14,15} with basal layer hyper-

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Fig. 1. Well-demarcated, bean-sized (10 × 15mm) black patch on the inner side of her left labia minora.



Fig. 2. Intense pigment deposition in the lower portion of the epidermis (H & E stain, × 100).



Fig. 3. Marked melanocytic hyperplasia with striking dendritic processes in the basal layer (Fontana-Masson stain, × 100).

pigmentation, with or without melanocytic hyperplasia^{2,4}. In the present case, genital melanosis may be better, because there was a basal layer hyperpigmentation, with melanocytic hyperplasia

Clinically genital melanosis is characterized by asymptomatic large pigmented macules or patches with irregular borders, multifocality and variegated pigment patterns. Despite the clinical features resembling malignant melanoma, the histologic findings of genital melanosis are quite benign, showing basal layer hyperpigmentation with or without melanocytic hyperplasia, and melanin-containing macrophages in the upper dermis.

A variety of benign conditions must be considered in the differential diagnosis of these hyperpigmented genital lesions. Pigmented benign neoplasms such as seborrheic keratosis, and melanocytic nevi are easily excluded by histologic

examination. The main differential diagnostic concern is postinflammatory hyperpigmentation. Such focal pigmentation may follow any inflammatory eruption, like fixed drug eruption or lichen planus. In the present case there was no prior history of trauma and papular lesions or other signs of lichen planus. Moreover, hyperpigmentation of the basal cell layer is not a feature of postinflammatory hyperpigmentation. Pigmented malignant neoplasms including vulvar melanoma and intraepithelial neoplasia may be differentiated easily by histologic examination. Systemic conditions¹⁷ associated with mucosal pigmentation like Peutz-Jeghers syndrome (gastrointestinal polyps and mucocutaneous pigmentation), NAME (nevi, atrial myxomas, myxoid neurofibromas, ephelides) syndrome, and LAMB (lentiginos, atrial myxomas, mucocutaneous myxomas, blue nevi) syndromes may have other systemic findings distinguishing these diseases from genital melanosis.

As it is difficult to differentiate this benign pigmented process clinically with early or evolving melanoma of the genitalia, and as genital melanosis is probably a completely benign condition without any potential for malignant transformation, the histopathologic differentiation is important, therefore aggressive surgical treatment is unwarranted; the only treatment necessary is reassurance.

We report herein a rare case of vulvar melanosis differentiated by clinicopathologic findings.

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