Genital Lentiginosis: A Benign Pigmentary Abnormality Often Raising Concern for Melanoma

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To the Editor:
Genital lentiginosis (also known as mucosal melanotic macules, vulvar melanosis, penile melanosis, and penile lentigines) occurs in men and women. Lesions present in adult life as multifocal, asymmetrical, irregular, and darkly pigmented patches—often raises concern for melanoma but is benign.

• Certain genetic conditions can present with genital lentiginosis.
• Dermoscopic assessment of the lesion color is highly helpful in narrowing the differential diagnosis; seeing no gray, red, blue, or white makes melanoma less likely.
• Be aware of genital lentigines and their characteristic presentation in adulthood to avoid unwarranted concern and unneeded surgery.

The irregular appearance of genital lentiginosis—multifocal, asymmetric, irregular, and darkly pigmented patches—often raises concern for melanoma but is benign. Certain genetic conditions can present with genital lentiginosis. Dermoscopic assessment of the lesion color is highly helpful in narrowing the differential diagnosis; seeing no gray, red, blue, or white makes melanoma less likely. Be aware of genital lentigines and their characteristic presentation in adulthood to avoid unwarranted concern and unneeded surgery.

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The authors report no conflict of interest.
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doi:10.12788/cutis.0654
associated with genital lentiginosis, intestinal polyposis, and macrocephaly. Vascular malformations, lipomatoses, verrucal keratoses, and acrochordons can occur. Bannayan-Riley-Ruvalcaba syndrome and Cowden syndrome may share genetic linkage; mutations in the tumor suppressor PTEN (phosphatase and tensin homolog deleted on chromosome ten) has been implicated in both syndromes. Underlying Carney complex should be excluded when genital lentiginosis is encountered.

Genital lentiginosis is idiopathic in most instances, but reports of lesions occurring after annular lichen planus suggest a possible mechanism. The disappearance of lentigines after imatinib therapy suggests a role for c-kit, a receptor tyrosine kinase that is involved in intracellular signaling, in some cases. At times, lesions can simulate trichrome vitiligo or have a reticulate pattern.

Men and women present at different points in the course of disease. Men often present with penile lesions 14 years after onset, on average; they notice a gradual increase in the size of lesions. Because women can have greater difficulty self-examining the genital region, they tend to present much later in the course but often within a few months after initial inspection.

Genital lentiginosis can mimic melanoma with non-homogeneous pigmentation, asymmetry, and unilateral distribution, which makes dermoscopic assessment of colors helpful in narrowing the differential diagnosis. Melanoma is associated with combinations of gray, red, blue, and white, which are not found in genital lentiginosis.

Biopsy of a genital lentigo is diagnostic, distinguishing the lesion from melanoma—failing to reveal the atypical melanocytes and pagetoid spread characteristic of melanoma in situ. Histologic findings can cause diagnostic difficulties when concurrent lichen sclerosus is associated with genital lentigines or nevi.

Lentigines on sun-damaged skin or in the setting of xeroderma pigmentosum have been associated with melanoma, but genital lentigines are not considered a form of precancerous melanosis. In women, early diagnosis is important when there is concern for melanoma because the prognosis for vulvar melanoma is improved in thin lesions.

Other entities in the differential include secondary syphilis, which commonly presents as macules and scaly papules and can be found on mucosal surfaces such as the oral cavity, as well as Kaposi sarcoma, which is characterized by purplish, brown, or black macules, plaques, and nodules, more commonly in immunosuppressed patients.

To avoid unwarranted concern and unnecessary surgery, dermatologists should be aware of genital lentigines and their characteristic presentation in adults.

REFERENCES