

A middle-aged lady with an asymptomatic, hyperpigmented plaque on the thigh: What is your diagnosis?

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CLINICAL PRESENTATION

A 44-year-old lady came to a dermatology clinic due to an asymptomatic, hyperpigmented plaque on her right thigh since 4 months ago. On physical exam, hypertrichosis on the lesion was notable (Figure 1). Rubbing the lesion resulted in erythema and edema of the lesion. She had no systemic disease and her family history was unremarkable.

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Figure 1. Hyperpigmented plaque with hypertrichosis. The lesion on the center is the site of biopsy.

Diagnosis

Smooth muscle hamartoma

Microscopic Findings

Biopsy was performed and showed hyperkeratosis, acanthosis, papillomatosis, and bundles of arrector pili muscle in the dermis (Figure 2).

DISCUSSION

Smooth muscle hamartoma is a benign proliferation of smooth muscle bundles in the dermis. It can be congenital or acquired^{1,2}. The congenital form is more common presenting at birth, but the acquired type is very rare, and only 13 cases have been reported in the English literature up to now^{2,3}.

It usually presents as a firm or indurated, skin colored or hyperpigmented plaque. In most cases, it is associated with hypertrichosis. Additionally, it can be presented with a patch or papule and without induration⁴.

A differential diagnosis of acquired smooth muscle hamartoma is becker nevus, and some articles consider them in a spectrum^{2,3}. The congenital form mostly involves the trunk and

extremities. The reported cases of the acquired form mostly involved chest, neck, trunk, forearm, scrotum, penis, labia major and shoulder². Most of the reported cases of acquired smooth muscle hamartoma are associated with male sex⁵.

In 2009, a rare case of acquired smooth muscle hamartoma was reported on the sole of a 21-year-old woman. Most of the cases of acquired smooth muscle hamartoma were originated from arrector pili and dartos muscles, but this case was the first case originated from vascular smooth muscle cells¹.

Pseudodarier sign is a diagnostic clue for smooth muscle hamartoma. Rubbing the lesion causes transient erythema, edema, and induration of the lesion. This sign is mostly positive in the congenital form, and the acquired form is usually negative for this sign^{2,6}.

The pathology of smooth muscle hamartoma shows bundles of smooth muscle in the dermis and sometimes subcutaneous tissue with variable acanthosis, papillomatosis, and basal hyperpigmentation^{4,5}.

The lesion is benign, and no treatment is indicated unless for cosmetic concerns⁵.

The site of involvement, as well as the presence of pseudodarier sign and rarity of acquired smooth muscle hamartoma, make this case an interesting one to report.

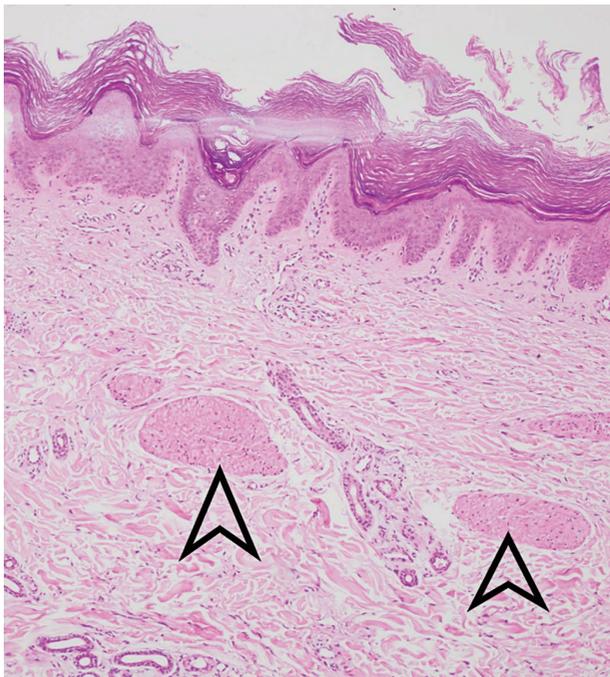


Figure 2. Hyperkeratosis, acanthosis, papillomatosis, bundles of arrector pili muscle (arrows) and dilated vessels in the dermis (H&E stain, 100×).

Conflict of Interest: None declared.

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