An Unusual Presentation of Piloleiomyoma

Dear Editor,

Piloleiomyomas are benign tumors arising from the arrector pili muscle of hair follicles. They usually present between the second and third decade of life.^[1] Predominantly, these tumors are located over the trunk and extremities, range in size between 2 mm to 2 cm, and are painful and firm in consistency.^[2]

Our patient was a 45-year-old gentleman who presented to the Department of Dermatology with chief complaints of nodular skin lesions over the left upper arm since the past 7 years. It began as a singular, small pea-sized lesion that gradually progressed to reach the current status.



Figure 1: Fleshy rubbery clustered nodules over the left upper arm

Lesions were asymptomatic, the major cause of concern being cosmetic disfigurement. Clinical examination revealed the presence of around 15 nodules over the left upper arm ranging from 5 cm × 4 cm × 6 cm to 1 cm × 2 cm × 2 cm in size [Figure 1]. They were nontender on palpation and demonstrated a soft-rubbery consistency. A skin biopsy from one of the nodules revealed a normal epidermis, with poorly circumscribed interlacing smooth muscle fibers located in the dermis [Figure 2]. On higher magnification these fibers were individually composed of eosinophilic cytoplasm with an elongated eel-like nuclei [Figure 3]. Immunohistochemistry for smooth muscle actin (SMA) was positive [Figure 4]. However, S100 and Ki67 staining were negative [Figures 5 and 6]. With these findings a diagnosis of cutaneous leiomyoma was made.

Table 1: Peculiar features of piloleiomyoma in the previous three case reports of painless piloleiomyoma, including ours

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tnessed for



Figure 2: Scanner view of an H&E skin biopsy specimen from one of the nodules showing a normal epidermis with poorly circumscribed interlacing smooth muscle fibers in the dermis



Figure 4: Immunohistochemistry positive for SMA



Figure 6: Immunohistochemistry negative for Ki67

The patient was counselled regarding his treatment. However, he declined any surgical intervention.

Painless piloleiomyoma has not been a commonly encountered entity. A thorough literature search



Figure 3: Individual smooth muscle fibers demonstrating an eosinophilic cytoplasm and an elongated eel-like nuclei (H and E 20×)



Figure 5: Immunohistochemistry negative for S 100

revealed only three case reports manifesting the painless display of piloleiomyoma.^[3-5] Interestingly, in all these three cases piloleiomyoma presented as a solitary nodule, a feature dissimilar to our case, which presented as multiple nodules. Other salient features of the previous three cases including ours have been summarized in Table 1.

With evaluation of our case and study of previous reported cases of painless piloleiomyoma, the authors would like to highlight that the painless quality of these lesions are not only a rarity, but painless leiomyomas are usually accompanied by other atypical findings that need vigilant identification. As far as treatment is concerned, surgical excision is the only available therapeutic modality at present, and given the high recurrence rate after surgery, this line of therapeutic intervention would not be practical with existent multiple nodules. To conclude, further exploration in the emergence of a concrete therapeutic modality in this setting is needed, as this domain still remains vastly unexplored.

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Conflicts of interest

There are no conflicts of interest.

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