Case Report

Giant pyogenic granuloma complicating a folliculitis decalvans

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INTRODUCTION

Pyogenic granuloma or lobular capillary hemangioma is a common and benign vascular proliferation that affects the skin and mucosa. It can take many forms and be misleading in some cases. Its giant variant is very rare. The pathogenesis is unknown but multiple factors can play a role on its onset. It is considered to be a pseudotumoral reaction to various stimuli, such as trauma, hormonal changes or the use of some medications. We report the case of a 35 years old male patient who presented with a large, ulcerated tumefaction of the scalp evolving since 4 months. The physical examination revealed a crescent shaped large ulcerated tumor with signs of folliculitis decalvans in the rest of the scalp. A skin biopsy was made and confirmed the diagnosis of pyogenic granuloma. The treatment consisted of a shave excision of the entire lesion. No recurrences were noted after two years of follow-up. This case illustrates the possible association of pyogenic granuloma with underlying dermatoses such as folliculitis decalvans.

CASE REPORT

A 35 years old male patient, with a five years history of alopecia and purulent discharge on the scalp, presented to our department with a large ulcerated fleshy tumefaction on the scalp that had been rapidly growing for the last 4 months with no preceding trauma. Physical examination revealed a crescent shaped ulcerated tumor measuring 8x4 cm, crossed by clumps of agglutinated hairs, surrounding a plaque of scaring alopecia. The rest of the scalp showed signs of inflammation, perifollicular pustules, multiple hairs emerging from the same follicle and areas of scaring alopecia (Figure 1). These clinical findings, along with dermoscopic aspect, were compatible with tufted hair folliculitis or folliculitis decalvans, which was ultimately confirmed on histological examination.

Our main diagnosis hypotheses for the fleshy excrescence were malignant tumors such as squamous cell carcinoma, achromic melanoma or cutaneous metastasis.

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Figure 1: (a) crescent shaped ulcerated tumor, crossed by clumps of agglutinated hairs, surrounding a plaque of scarring alopecia; (b) shave excision of the entire lesion; (c) Evolution after one year.

Figure 2 (a and b): lobular pattern of vascular proliferation with inflammation and oedema consistent with a pyogenic granuloma.

A skin biopsy was performed showing a lobular pattern of vascular proliferation with inflammation and oedema suggesting the diagnosis of pyogenic granuloma (Figure 2). A shave excision of the entire lesion without electrocauterization was performed to preserve the remaining hair follicles. No recurrences were noted after two years of follow up (Figure 1).

DISCUSSION

Pyogenic granuloma or lobular capillary hemangioma is a common benign vascular proliferation that can affect the skin and mucosa, usually after minor injuries. It was first described by Poncet in 1897 as botryomycosis hominis and in 1904 by Hartzell as pyogenic granuloma.2

Clinically, pyogenic granuloma presents as a sessile or pedunculated lesion that is generally unique but can be multiple in some cases (use of some medications, Warner Wilson Jones syndrome). It usually bleeds easily and is most frequently seen in children and young adults and during pregnancy. It mainly occurs on body parts exposed to frequent trauma, such as the hands, arms, feet and upper trunk.3

Pyogenic granulomas on the scalp are not uncommon. Giant forms in this site have also been described previously, generally reported in a context of trauma.4,5 In our case there was no trauma preceding the onset of the lesion. It is also the first report of spontaneous giant pyogenic granuloma appearing on tuffed hair folliculitis lesions or any kind of scaring alopecia.

The pathogenesis of PG is not clearly understood. It is considered to be a pseudotumoral reaction to various stimuli, such as trauma, hormonal changes (pregnancy) or the use of some medications such as isotretinoin, indinavir and EGFR inhibitors.4 In the present case, the chronic irritation induced by the underlying condition is probably the main etiologic factor in the absence of trauma or any medication intake. That also explains the particular shape of the lesion that stops right on the edge of the area of scaring alopecia, where the fibrosis has apparently prevented the extension of the vascular proliferation.
CONCLUSION

Pyogenic granuloma is a common benign vascular proliferation. It can be induced by a chronic irritation without a patent trauma, and the pathogenesis is not clearly understood. The giant form is rare, and can be associated with an underlying dermatosis, as shown in our case.

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