

Ulceration of the Scalp: Lipogranuloma Induced by Industrial Oils in a Decorator Woman

Dear Editor,

Alipogranuloma or oleoma is a focus or nodule of foreign-body type granulomatous inflammation, in association with lipid material, usually mineral oil, deposited in tissues. This material has been widely used for cosmetic purposes and for augmentation of the body contour in the early 90s.¹ We present a case of oleoma on the scalp in a woman with no previous evident risky practice.

A 46-year-old decorator woman presented with an ulceration of the scalp for 11 months. She complained of swelling and tenderness of the scalp. Her medical history showed that the lesion began as a 4-cm diameter raised plaque that enlarged over a 6-week period to the present ulcer. Neither antifungal drugs nor antibiotic therapies showed improvement. She reported she usually worked with industrial oil-based paints with no protection to avoid direct contact. On examination, we found a 9-cm ulceration on the scalp, with irregular and elevated borders (Fig. 1). No adenopathies were detected. The first diagnosis considered was an ulcerated basal cell carcinoma. Prior to surgery, a skin biopsy was performed which revealed a lesion consisting of fat vacuoles with foreign body type giant cells and scattered lymphocytes (Fig. 2). Diagnosis of oleoma was made.

The injection of oil-based foreign materials was used as an early medical intervention for the augmentation of body contour in the late last century. Injections of oil may cause foreign body reactions, leading to lesions named according to the injected material, e.g. paraffinoma, oleoma. Systemic distribution can occur, resulting in pulmonary complications. These lesions have been widely described in bodybuilders who practise intramuscular self-injection



Fig. 1. Ulceration of the scalp with elevated edges induced by oil paints.

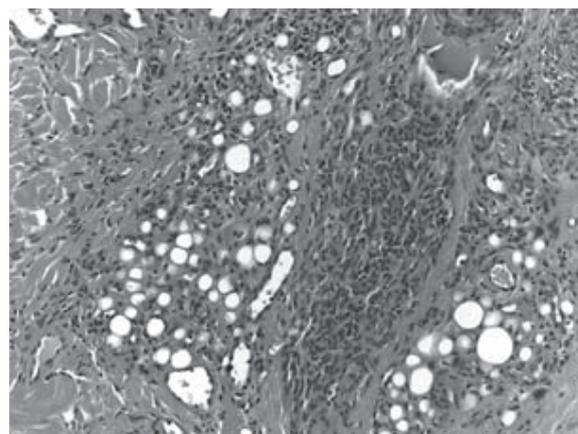
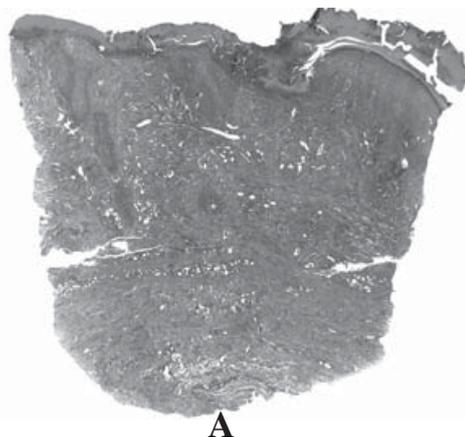


Fig. 2. (A) Panoramic view of the lesion: Ulcerated epidermis with lymphohistiocytic infiltrate associated with perivascular eosinophils in dermis (haematoxylin-eosin). (B) Oil-induced vacuoles with different sizes showing a pseudolipomatose pattern (haematoxylin-eosin x20).

of walnut oil and sesame seed oil.¹ Our patient denied this kind of practices, but she worked with oil-based paints. The main tasks of our patient included: stripping off old wallpapers or paint, mixing paint to the required shade, applying layers of paint and hanging wallpaper, rag-rolling, graining, marbling and removing old coatings before applying new ones with industrial paint equipment. Because it was unclear how the lipid material reached the scalp of this patient, we reviewed her medical history and it was revealed that borderline personality disorder was diagnosed 6 months ago, but patient did not follow the therapy plan.

Reinterrogating the patient, she confessed self-injurious behaviour with sharp painting tools. The importance of lipogranulomas lies in differentiating it from malignancy to avoid extensive surgery. The patient was misdiagnosed with basal cell carcinoma, but a biopsy discarded that first diagnosis. Although, the usual treatment is the total or partial excision, steroids have been reported as a satisfactory therapy.² We performed a narrow excision of the lesion and no flap reconstruction was needed. Histological analysis of the lesion showed no signs of malignancy.

Diagnosis of oleomas can be a challenge, particularly when the medical history is not suspicious, such as in this case. These conditions can easily be misdiagnosed with malignancies, leading to aggressive therapies. Anamnesis is the physician's most important basis of diagnosis, with skin biopsy being performed in suspicious lesions. Our case is unusual due to the uncommon aetiology and the atypical location. The histologic findings were decisive to make the correct diagnosis and treatment.

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