# About a Rare and Specific Clinical Entity: The Alopecic and Aseptic Nodules of the Scalp. A Case Report and a Literature Review

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### Abstract

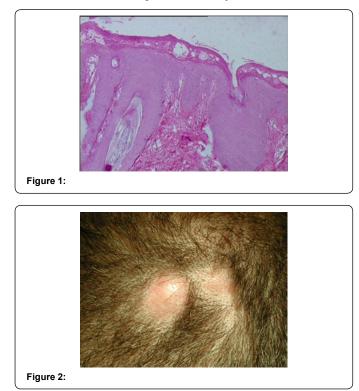
Alopecic and Aseptic Nodules of the Scalp, first described as pseudo cyst of the scalp, represent a new clinical entity. The nodules are glistening and non fluctuating and the rest of the scalp remains normal. Their surface is rounded and domed and is the seat of an inflammatory cicatricial alopecia. We report one case of AANS and discuss about clinical features, histology, aetiology and treatment.

## **Case Report**

A 42-year-old Caucasian man without medical history appeared with papular and non-fluctuating nodular lesions at the top of the scalp. These lesions had been present for 3 years without modification and appeared slowly without pain. Their surface was rounded and domed and was the seat of a cicatricial alopecia (Figure 1). Their dimensions were about 4 cm long and 3 cm wide.

The rest of the scalp was normal. We aspirated the nodules using either the dry or citrine liquid technique and obtained negative bacteriological and mycological cultures. Upon examination under polarised light, hair was normal. Mycological culture of the hair was negative. A blood examination did not reveal any diseases.

Before our examination, the patient received various antibiotics, antiseptics and antimycotics without clinical modification. Histological examination revealed a granuloma composed of multinucleated



giant cells associated with dermal inflammatory infiltrate rich in lymphocytes and histiocytes (Figure 2).

We diagnosed the alopecic and aseptic nodules of the scalp. Surgery was proposed but the patient preferred to wait. Two years after this decision, the lesions are still present.

## Discussion

Alopecic and aseptic nodules of the scalp (AANS) represent a new clinical entity first described in Japan in 2005 under the term "pseudocyst of the scalp". More recently, a European publication reported this condition as AANS because the previously described histological picture of the pseudocyst is inconsistent [1,2].

AANS are a rare entity but not exceptional, with 20 cases reported. However, this number is probably an underestimation. The condition affects, adolescents ranging in age from 12 to 40 years [1,2].

Clinically, these nodules are glistening and non-fluctuating and the rest of the scalp remains normal. Their surface is rounded and domed and is the seat of an inflammatory cicatricial alopecia. Aspiration of the nodules was performed using either the dry or citrine sterile liquid technique and yielded negative bacteriological and mycological cultures.

Histologically, we found a granuloma composed of multinucleated giant cells associated with scarring alopecia and dermal inflammatory infiltrate rich in lymphocytes and histiocytes.

The presence of neutrophils is possible and the image of the pseudocyst described originally was rarely observed [1,2].

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The differential diagnosis included dissecting cellulitis of the scalp, where several fluctuating nodules are the site of an initial inflammatory alopecia that can then become scarred due to regression [1,2].

The aetiology of these nodules is unknown but is probably a special form of deep folliculitis. The alopecia is non-scarring because the inflammatory granuloma is located in the bulge region. As in alopecia areata, the granuloma may be secondary to impaired follicular and/or take a role like a foreign body and/or be of immunological nature [1,2]. If no spontaneous regression appears, treatment with doxycycline 100mg/d for 30 days is described for the anti-inflammatory effect as an alternative to surgery [1,2].

#### Disclosure

All authors certified that they have no conflicts of interest, including specific financial interests and relationships and affiliations relevant to the subject of this manuscript.

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