

## “Alopecic and Aseptic Nodules of the Scalp” and “Pseudocyst of the Scalp”: 2 Different Conditions or One Single Entity?

Ramon Grimalt\*

Faculty of Medicine and Health Sciences, Universitat Internacional de Catalunya, Barcelona, Spain

\*Corresponding author: Ramon Grimalt, Faculty of Medicine and Health Sciences, Universitat Internacional de Catalunya, Barcelona, Spain, Tel: + 34 617301661; Fax: +55 19 35217563; E-mail: rgrimalt@uic.es

Received date: December 14, 2015; Accepted date: January 21, 2016; Published date: January 25, 2016

Copyright: ©2015 Grimalt R. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Introduction

There is a strong controversy in the literature about the terminology of these diseases. Some authors still believe that “Pseudocyst of the scalp” and “Alopecic and aseptic nodule of the scalp” are 2 different conditions.

The first of the 2 terms used was: “Pseudocyst of the scalp” and was first described in 1992 by Iwata et al. [1] in a report of 19 Japanese patients presenting with alopecia and a solitary subcutaneous tumor with a histologically ill-defined cyst wall. Some years later, in 1998 in France, Chevallier [2] reported 3 cases described in French as ‘noninfectious abscess of the scalp with alopecia’. In 2011, Abdennader et al. [3] reported 15 cases with similar morphological features to those of pseudocyst of the scalp; however, the condition was referred to as “alopecic and aseptic nodules of the scalp” because pseudocyst formation was not always present. From our point of view both diseases share so many clinical factors that should be considered one single entity.

When Iwata et al reported in 1992 the entity “Pseudocyst of the scalp” [1] they reported 19 cases of a dome-shaped subcutaneous tumor with alopecia and an ill-defined cyst wall. Such tumors, as they described were seen predominantly in men aged between 18 and 40 years, and located between the top and forehead area of the scalp. Years later many other reports of similar cases have appeared in the Japanese literature [4-7].

When Iwata et al reported in 1992 the entity “Pseudocyst of the scalp” [1] they reported 19 cases of a dome-shaped subcutaneous tumor with alopecia and an ill-defined cyst wall. Such tumors, as they described were seen predominantly in men aged between 18 and 40 years, and located between the top and forehead area of the scalp. Years later many other reports of similar cases have appeared in the Japanese literature [4-7].

Alopecia in these 2 entities is the most striking clinical aspect, as all other cystic formations on the scalp do not show localized alopecia. The alopecia is of the non-scarring type, probably because the granulomatous infiltrate is located around the lower part of the hair follicle, beneath the bulge, as it is the case in alopecia areata. Moreover, we cannot exclude an immune process inducing an inflammatory granuloma, which attacks the follicle in the following step. Thus, the granuloma might be induced either by a follicular alteration or a foreign body, or by an immunological response triggered by an unknown factor [8].

The etiology of both conditions is unknown, but the pseudocyst is considered to initially develop as folliculitis associated with follicular occlusion [1] or foreign body [2]. When follicular occlusion occurs, a granulomatous infiltrate is generated accompanied by acute

inflammation with histiocytes, lymphocytes, and giant cells clustered around each follicle. Subsequently, the central tissue undergoes necrosis and blood and lymphatic vessels are broken, resulting in a bloody, yellowish exudate and pseudocyst formation [9]. The etiology of AANS is also unknown. It is probably a particular form of deep folliculitis leading to a non-scarring type of alopecia. It might represent a part of a spectrum including several diseases such as acne conglobata and hidradenitis suppurativa, in which a follicular occlusion is suspected as the cause of the cyst or pseudocyst but in many cases there is no association with any of these conditions [8]. Further studies are obviously needed to clarify the pathogenesis of AANS [3].

The histopathology of these 2 entities is probably the most differential fact. On the “pseudocyst of the scalp” there is a pseudocyst and granuloma in deep dermis. [10] However, no granuloma is found in all cases published as pseudocyst of the scalp [9]. We believe that some racial factors, the original patients were described in Japan or the different type of hair might explain these findings. Another possible explanation would be that the histology changes with the evolution of the disease.

In the AANS there is typically no granuloma but again the different moment of presentation may explain these differences.

Attempts to describe the trichoscopic aspect of these conditions has not succeeded on differentiating them [11,12].

Treatment of this two condition show similar response. In both conditions lesions will resolve without subsequent recurrence. Several treatments have been reported, including needle aspiration, surgical excision, steroidal injection, and the administration of doxycycline at 100 mg/day [9,13].

In summary, we report here a review of 2 apparently different diseases that from the point of view of the original authors that were not aware of the similar condition one in France and one in Japan, are in fact different. From our point of view we are in front of the same condition and further published cases will confirm this hypothesis.

### References

1. Iwata T, Hashimoto T, Niimura M (1992) A pseudocyst with inflammatory granulation tissue on scalp- Pseudocyst of scalp. *Jpn J Clin Dermatol* 46: 9-16.
2. Chevallier J (1998) Abscès non infectieux et alopeciques du cuir chevelu: nouvelle entité? *Nouv Dermatol* 17: 181.
3. Abdennader S, Vignon-Pennamen MD, Hatchuel J, Reygagne P (2011) Alopecic and aseptic nodules of the scalp (pseudocyst of the scalp): a prospective clinicopathological study of 15 cases. *Dermatology* 222: 31-35.
4. Nukaga Y, Matsuura K, Matsushima Y (1995) A case of pseudocyst of the scalp. *Hifu Rinsho (Tokyo)* 37: 1772-1773.

5. Shibagaki N, Sugiyama H, Ohtake N, Furue M, Shimada S (1996) Analysis of 3 cases of inflammatory granulomatous nodule with pseudocyst associated with follicular occlusion triad - Pseudocystic granuloma of skin. *Jpn J Clin Dermatol* 50: 105-110.
6. Tsuruta D, Hayashi A, Kobayashi H, Nakagawa K, Furukawa M, et al., (2005) Pseudocyst of the scalp. *Dermatology* 210: 333-335.
7. Aiba S, Mukai H (2002) Pseudocyst of the scalp. *Pract Dermatol* 24: 893-896.
8. Abdennader S, Reygagane P (2009) Alopecic and aseptic nodules of the scalp. *Dermatology* 218: 286.
9. Lee SS, Kim SY, Im M, Lee Y, Seo YJ, et al., (2011) Pseudocyst of the Scalp. *Annals of Dermatology* 23: S267-S269.
10. Seol JE, Park IH, Kim DH, Park SH, Kang JN, et al., (2015) Alopecic and Aseptic Nodules of the Scalp/Pseudocyst of the Scalp: Clinicopathological and Therapeutic Analyses in 11 Korean Patients. *Dermatology*.
11. Garrido-Colmenero C, Arias-Santiago S, Aneiros Fernández J, García-Lora E (2014) Trichoscopy and ultrasonography features of aseptic and alopecic nodules of the scalp. *J Eur Acad Dermatol Venereol*.
12. Bourezane Y, Bourezane H (2014) [Two new trichoscopic signs in alopecic and aseptic nodules of the scalp: "Eastern pancake sign" and comedo-like structures]. *Ann Dermatol Venereol* 141: 750-755.
13. Fischer-Levancini C, Iglesias-Sancho M, Collgros H, Sánchez-Regaña M (2014) Aseptic and alopecic nodules of the scalp. *Actas Dermosifiliogr* 105: 208-211.