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[[Translated article]] Multiple Yellowish Papules on the Scalp

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Casos para el diagnóstico

Múltiples pápulas amarillentas en el cuero cabelludo

[[Translated article]] Multiple Yellowish Papules on the Scalp

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Case presentation

Clinical history

A 70-year-old woman, with no relevant past medical history, consulted due to a 3-month history of yellowish multiple asymptomatic papules on her scalp, without recalling any triggering factor. She denied any other associated systemic symptoms. No other family members exhibited similar lesions either. The patient had no prior history of neoplasms, alopecia, or inflammatory diseases affecting the scalp.

Physical examination

Physical examination revealed 8 well-demarcated, oval-shaped, yellowish papules of a smooth surface, firm consistency, and variable diameters (3–5 mm), located in the occipital region of the scalp (Fig. 1A). Dermoscopy revealed the presence of structureless yellowish areas with some small branched vessels on the surface and periphery of some lesions (Fig. 1B).

Histopathology

A 4 mm punch biopsy was performed on one of the lesions. Histopathological examination revealed the presence of a cystic cavity in the superficial dermis, without internal contents (Fig. 2A). The cyst wall consisted of a stratified squamous epithelium with a few cell layers, without a granular layer, and internally lined by an eosinophilic cuticle with an undulating

contour and fine projections extending into the lumen (Fig. 2B). Several sebaceous glands were adjacent to the cystic cavity (Fig. 2C).

Diagnosis and comments

Diagnosis

Multiple steatocystomas.

Treatment

After confirming diagnosis, the patient was informed about the different therapeutic options available for this condition, including surgical excision or drainage, intralesional corticosteroids, CO₂ laser therapy, cryotherapy, and even retinoids. Ultimately, given the asymptomatic nature of the lesions and the minimal aesthetic impact reported by the patient, a watchful waiting approach was agreed upon.

Follow-up

Subsequent follow-up evaluations showed that lesions remained stable, with no increase in number or size, and any new symptoms.

Discussion

Multiple steatocystomas are rare hamartomatous malformations of the pilosebaceous duct, typically developing in childhood or adolescence, either sporadically or in a familial pattern with autosomal dominant inheritance (associated with keratin 7 gene mutations). They present as multiple nodules or cysts of variable size (0.1–3 cm) with an elastic consistency, covered by normal-colored skin, and are most widely located on the upper chest, axillae, upper limbs, and scrotum^{1,2}.

Exceptionally, multiple steatocystomas can occur in adulthood, with lesions exclusively affecting the scalp, displaying peculiar characteristics as yellowish "pseudo-xanthomatous" papules, which require clinical differentiation from eruptive xanthomas, xanthogranulomas, or sebaceous differentiation adnexal tumors³. Scalp-localized cases are usually sporadic and have been observed, as in this case, in middle-aged to elderly women (Table 1)^{1-4, 8-10}.

Although steatocystomas are benign, a definitive diagnosis via histological study is crucial due to their potential association with syndromes or conditions such as LEOPARD syndrome, basal cell nevus syndrome, multiple trichoblastomas, giant intracranial dermoid cyst, hypothyroidism, hypotrichosis, pachyonychia congenita, or hidradenitis suppurativa⁵. These associations were ruled out in the patient. Given the benign nature of the condition and the risk of scarring and recurrence, treatment is reserved for symptomatic cases, with both surgical and non-surgical options⁶.

The clustered ("agminated") distribution of these lesions, exclusively localized on the scalp, represents a novel and atypical presentation of multiple steatocystomas.

Conflicts of interest

None declared.

References

1. Gonzalez López MA, Rodríguez-Vigil T, Soler Sánchez T, Pérez Oliva N. A case of steatocystoma multiplex limited to the scalp. *Actas Dermosifiliogr* 2000;91:521-524
2. Kumakiri M, Yajima C. Eruptive steatocystoma multiplex on the scalp. *J Dermatol* 1991;18:537-539.
3. Kim SJ, Park HJ, Oh ST, Lee JY, Cho BK. A case of steatocystoma multiplex limited to the scalp. *Ann Dermatol*. 2009;21:106-9.
4. Lee D, Chun JS, Hong SK, Seo JK, Choi JH, Hoh JK, et al. Steatocystoma multiplex confined to the scalp with concurrent alopecia. *Ann Dermatol*. 2011;23: 258-60.
5. Kamra HT, Gadgil PA, Ovhal AG, Narkhede RR. Steatocystoma multiplex-a rare genetic disorder: a case report and review of the literature. *J Clin Diagn Res*. 2013;7:166-8
6. Amin M, Hashim, P. Steatocystoma Multiplex: Case Report and Review of Treatment. *SKIN The Journal of Cutaneous Medicine*. 2018;2:75–9.
7. Marley WM, Buntin DM, Chesney TM. Steatocystoma Multiplex Limited to the Scalp. *Arch Dermatol*. 1981;117:673–4.
8. Belinchón I, Mayol MJ, Onrubia, JA. Steatocystoma multiplex confined to the scalp. *Int. J. Dermatol*.1995; 34: 429-30
9. Mortazavi H, Taheri A, Mansoori P, Kani ZA. Localized forms of steatocystoma multiplex: Case report and review of the literatura. *Dermatol Online J*. 2005;11:22.
10. Hansen KK, Troy JL, Fairley JA. Multiple papules of the scalp and forehead. Steatocystoma multiplex (facial papular variant). *Arch Dermatol*. 1995;131:835-8

Figure 1. (A) Well-demarcated, oval-shaped, yellowish papules of a smooth surface and variable diameter (4–6 mm) in the scalp occipital region. (B) Dermoscopy shows structureless yellowish areas with small-branched vessels in surface and periphery.

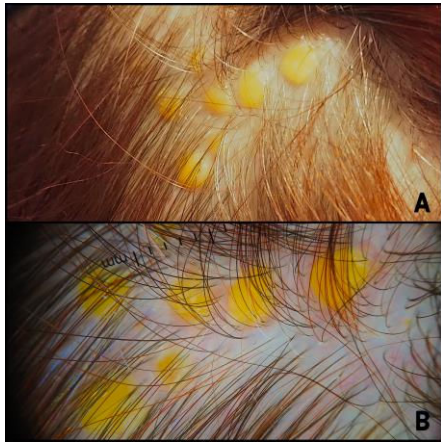


Figure 2. (A) Cystic cavity in the superficial dermis. Hematoxylin-eosin $\times 10$. (B) Higher magnification showing the cyst wall composed of a stratified squamous epithelium, without a granular layer, internally lined by an eosinophilic cuticle with an undulating contour. Hematoxylin-eosin $\times 50$. (C) Sebaceous glands adjacent to the cystic cavity. Hematoxylin-eosin $\times 40$.

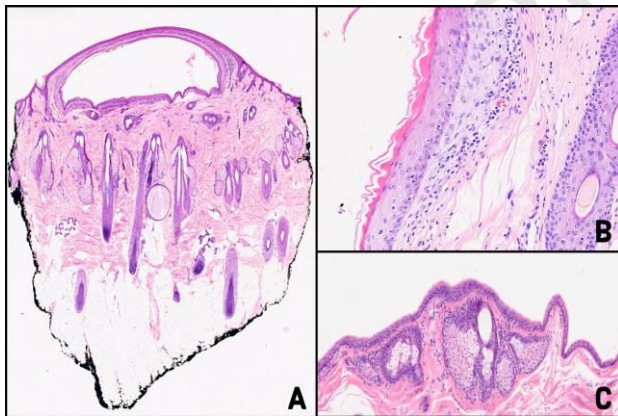


Table 1. Main characteristics of localized forms of multiple steatocystomas described in literature

Patient	Age	Sex	Relevant Medical History	Affected Area	Morphology	Symptoms
González López et al. ¹	75 years	Female	Autosomal dominant polycystic kidney disease. No similar lesions in family members	Left retroauricular and posterior cervical region	Multiple grouped cysts with a pearly tone, smooth surface, firm consistency, 1–3 mm	Asymptomatic
Kumakiri et al. ²	71 years	Female	No similar lesions in family members	Scalp, temporal and occipital region	More than 120 yellowish papules and cysts, smooth surface, less than 2 mm	Asymptomatic
Kim et al. ³	63 years	Female	No similar lesions in family members	Scalp, temporal region	Multiple yellowish papules, smooth surface, 3–5 mm in diameter	Asymptomatic
Lee et al. ⁴	50 years	Male	Unknown	Scalp (disseminated)	Multiple smooth-surfaced, skin-colored cysts, 2–40 mm in diameter, along with alopecic plaques	Asymptomatic
Marley et al. ⁷	70 years	Male	No similar lesions in family members	Scalp, central region	Four smooth-surfaced nodules, yellowish in color, 13–24 mm in diameter	Asymptomatic
Belinchón et al. ⁸	50 years	Female	No similar lesions in family members	Scalp (disseminated)	About 40 yellowish papules, 1–4 mm in diameter	Asymptomatic
Mortazavi et al. ⁹	70 years	Male	No similar lesions in family members	Scalp (disseminated)	Multiple smooth-surfaced, yellowish papules, 5–11 mm in diameter	Asymptomatic
Hansen et al. ¹⁰	71 years	Female	No similar lesions in family members	Frontal and central scalp region	Multiple smooth-surfaced, skin-colored papules, subcentimetric in size	Asymptomatic