

Trichofolliculoma: An Uncommon Hair Follicle Hamartoma

TRİKOFOLLİKÜLOMA: AZ RASTLANAN BİR KIL FOLLİKÜL HAMARTOMU

Güneş GÜR, MD,^a Başak YALÇIN, MD,^a Emine TAMER, MD,^a Pınar ÖZTAŞ, MD,^a
Muhterem POLAT, MD,^a Nurdan LENK, MD,^a Ferda ARTÜZ, MD,^a Nuran ALLI, MD^a

^a1st Dermatology Clinic, Ankara Numune Education and Research Hospital, ANKARA

Abstract

Trichofolliculoma is an uncommon hamartoma of hair follicle tissue. A case of trichofolliculoma with the appearance of a papule with a white tuft of hair protruding from the center is presented. It is a tumor, which could be confusing to the unfamiliar eye, but once recognized, it is a benign cutaneous adnexal tumor that is cured by simple surgical excision.

Key Words: Trichofolliculoma, hair follicle, follicle hamartoma, dilated follicle

Özet

Trikofolliküloma, kıl follikül dokusunun az rastlanan bir hamartomudur. Burada, ortasından ip şeklinde uzantı olan deri renginde papül görünümünde bir trikofolliküloma olgusu sunulmaktadır. Komplike bir tümör izlenimi veren bu yapı, doğru tanı aldığında basit cerrahi eksizyon ile tedavi edilebilen benin karakterde bir deri eki tümörüdür.

Anahtar Kelimeler: Trikofolliküloma, kıl follikülü, follikül hamartomu, dilate follikül

Türkiye Klinikleri J Dermatol 2006, 16:69-71

Trichofolliculoma (TF) is an uncommon hamartoma of hair follicle tissue. It may present as a dilated pore, a subcutaneous nodule or as a papule with wool-like hairs protruding from the center. It is a tumor, which could be confusing to diagnose to the unfamiliar eye, where as once recognized, it is a benign cutaneous adnexal tumor that is cured by simple surgical excision.¹⁻³

Case Report

A 48-year-old male patient referred to our outpatient clinic with the complaint of a papule on his cheek that had hair growing from. His dermatological examination revealed a pale erythematous papule of size 0.5x0.5 cm on his left zygomatic region. A white tuft of hair was protruding from

the center of the lesion (Figure 1). He explained that the papule was asymptomatic and that he had had it for 5 years with no change of its size. He reported that he had the habit of cutting the white hair of the papule, but that it would grow back. An excisional biopsy was performed and the histological examination of the lesion revealed a primary dilated hair follicle with many surrounding secondary follicles (Figure 2, 3). A diagnosis of trichofolliculoma was made.

Discussion

TF is a benign, solitary tumor. Lesions range from 0.2-0.5 cm. It may appear as a dilated pore, a whitish, pearly papule, or a smooth nodule which may have wisps of immature hair protruding from a central pore.⁴⁻¹⁰ It tends to locate on the face and scalp.² Other sites of occurrence include the neck, the external auditory canal,⁵ the eyelid,^{6,7} upper lip,⁸ intranasal⁹ and vulvar location¹⁰ Clinically it is a tumor of adulthood with an exceptional report of a congenital trichofolliculoma.⁴ There is no associated family history, or other abnormalities suggesting that it is acquired rather than being a part of a

Geliş Tarihi/Received: 21.04.2005 Kabul Tarihi/Accepted: 22.12.2005

Yazışma Adresi/Correspondence: Güneş GÜR, MD
Ankara Numune Education and Research Hospital,
1st Dermatology Clinic, Sıhhiye, ANKARA
gunesgur@hotmail.com

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Türkiye Klinikleri J Dermatol 2006, 16

Figure 1. An erythematous papule with a white tuft of hair protruding from the center could be observed on the left zygomatic region.

Figure 2. Underneath a normal appearing epidermis, a primary dilated follicle appearing as a cystic space lined with squamous epithelium is seen in the upper dermis. Surrounding secondary follicular structures are observed. (H.E.stain x40).

syndrome.¹⁰ Our patient also did not have an associated family history or another abnormality.

TF is a highly structured hamartoma of the hair follicle.¹¹ Kligman and Pinkus have considered this uncommon tumors' differentiation as being more than trichoepitelioma and less than of hair follicle nevus.¹ Study of cytokeratin expressions of trichoepitelioma has revealed that TF mainly differentiates toward the hair bulge, and the outer root sheath in the isthmus.¹² Histologically it is characterized by a primary dilated follicle that is lined with infundibular stratified squamous epithe-

lium continuous with the epidermis. Numerous secondary follicles budding from the walls of the primary follicle are observed. The secondary follicles show various degrees of differentiation. They can be highly differentiated showing all the layers of a hair follicle, including the hair shaft. They even contain a high content of glycogen on their outer sheath just like mature hair follicles along with small sebaceous glands.^{2-4,10,11} A fibrovascular stroma encircling these structures is another characteristic of trichofolliculoma.^{1,3} A case showing incidental focal acantholytic dyskeratosis has been described.¹³

Differential diagnose includes millium, keratoacanthoma, basal cell carcinoma, molluscum contagiosum, trichoepitelioma, and syringoma. Milia are small, epidermal-lined cysts that usually appear as multiple 1-2 mm white, globoid, firm lesions on the face. Keratoacanthoma is usually a single, firm, dome shaped nodule, 1-2.5 cm in diameter, with a central horn-filled crater on sun exposed skin. Basal cell carcinoma is the most common cutaneous malignancy. Highly variable in both clinical and histologic appearances, a basal cell carcinoma can appear as a pearly nodule with telangiectatic vessels on the surface. Molluscum contagiosum presents as variable numbers of discrete, waxy, skin colored, umbilicated, dome shaped papules, 2-4 mm in size. Trichoepitelioma

Figure 3. A disorganized hair follicle that appears to be a dilated cystic space is observed in relation with the epidermis. Follicular structures of different sizes are seen around it. (H.E.stain x40).

is usually a solitary flesh-colored nodule on the face < 2mm in diameter. Syringomas occur predominantly in women at puberty or later in life as multiple, skin colored, slightly yellow, soft papules, 1-2 mm in diameter, on the lower eyelids.¹⁰ Differential diagnose also includes dilated pore of Winer, pilar sheath acanthoma, and sebaceous trichofolliculoma, all characterized by a dilated follicle lined with stratified squamous epithelium.^{4,14} Dilated pore of Winer histologically shows digitate projections of the retes into the surrounding dermis from the walls of the cystic cavity.¹⁵ Pilar sheath acanthoma is histologically characterized with multiple, lobular tumor masses originating from the hair root epithelium; from the central cavity into the surrounding dermis. These structures lack the high degree of differentiation of the secondary follicles of trichofolliculoma.¹⁶ Sebaceous trichofolliculoma, is a variant of trichofolliculoma that is more often seen in children on areas rich in sebaceous glands. Hair protruding from a papule or a centrally depressed lesion could be observed. Numerous, large sebaceous glands are seen in connection with the secondary follicles.^{4,17}

Even though there is one report showing perineural invasion,¹⁸ trichofolliculoma is a benign cutaneous adnexal tumor whose excision is curative.¹⁻¹⁸

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