Eruptive Vellus Hair Cyst (Case Report)¶

ERUPTİF VELLUS KIL KİSTİ (OLGU SUNUMU)

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Summary

Eruptive vellus hair cysts are formed as a result of faulty development or defective formation of infundubili of vellus type hair follicles. The lesions are asymptomatic follicular papules located usually on the anterior chest or upper abdomen. EVHC is usually seen between 2- 24 years. We report a 23 years old male diagnosed EVHC by clinical and histologic examination and review the literature with respect to its clinical features, diagnosis and options for therapy.

Key Words: Eruptive vellus hair cyst

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Özet

Eruptif vellus kıl kisti, vellus kıl follikükünün hatalı yapımı veya gelişimi sonucu oluşan, genellikle göğüs ön yüzü ve karın bölgesinde yerleşen, folliküler, asemptomatik papüllerle seyreden bir hastalıktır. Hastalığın başlangıç yaşı sıklıkla 2-24 yaşlar arasındadır. Burada 23 yaşında bir erkek hastada eruptif vellus kıl kisti olgusu sunulmakta ve olgu klinik, ayırıcı tanı ve tedavi yaklaşımları açısından tartışılmaktadır.

Anahtar Kelimeler: Eruptif vellus kıl kisti

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Eruptive vellus hair cysts (EVHC) were first described by Esterly and colleagues in 1977 (1-3). Case reports and small series of EVHC have been reported since original description (2). Undoubtedly this entity is much more common than the literature suggests since the cysts are usually asymptomatic and resembles many conditions such as acne vulgaris and syringomas (2,4,5).

It is proposed that pathogenic mechanism involues inherently abnormal vellus hair follicles with keratinous plugs of the follicular infundibula deflecting the vellus hair shafts (1). It has a possible autosomal dominant inheritance and it is reported to be associated with other inherited intradermal appendage disorders such as steotocystoma multiplex (6).

We report a case diagnosed EVHC by clinical and histologic examination and review the literature with respect to its clinical features, diagnosis and options for therapy

Case Report

A 23 year-old man was evaluated for a 6 year history of multipl asymptomatic, persistent papules located on the anterior surface of the trunk (Figure 1). Examination of the skin revealed multiple, flesh-colored, reddish-brown and brown-black, 1-3 mm in diameter, smooth surface papules and white comedo-like lesions scattered over the chest and abdomen. There were no real comodones or inflammatory reaction. Some lesions were traumatized by the patient.

Physical examination revealed normal findings.

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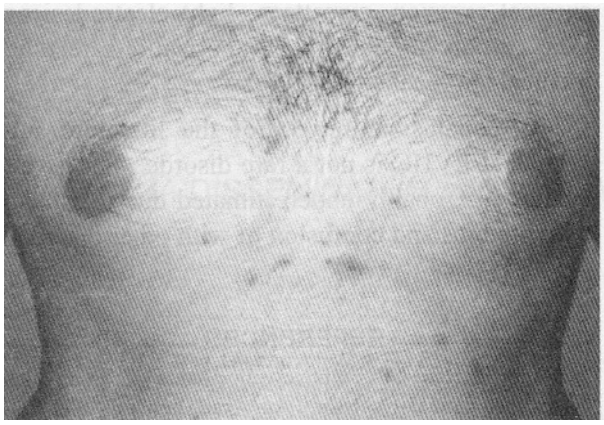

Figure 1. Multiple reddish-brown and brown-black, 1-3 mm in diameter papules located on the anterior surface of the trunk.

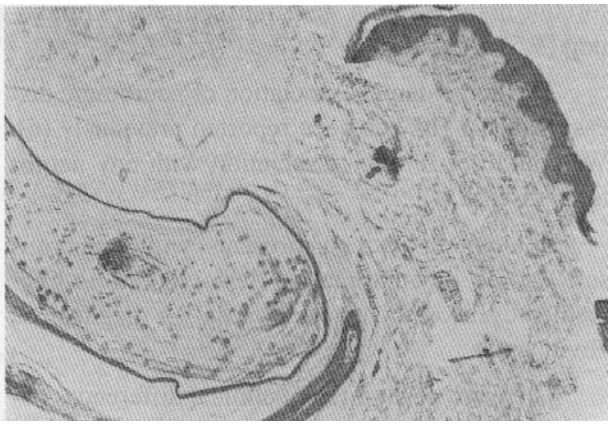

Figure 2. Cystic structure in the middermis that is lined by squamous epithelium and containing laminated keratinous materials and vellus hairs (H&E X 40).

Laboratory tests including total blood count, biochemistry and urine analysis were within normal limits. No other family members were similarily affected. The patient had not noted gradual progression of the lesions over time. No tendency to remission was observed.

A biopsy specimen for histopathologic examination was obtained from a papul on the chest. The section showed cystic structure in the middermis which was lined by squamous epithelium and containing laminated keratinous materials and vellus hairs (Figure 2-3).

On the basis of these findings the clinical and histologic diagnosis were EVHC.

Topically 0.05% tretionin cream was applied once daily (at night), combined with 10% urea cream (in the morning). At the three month follow up visit, there was no sign of resolution.

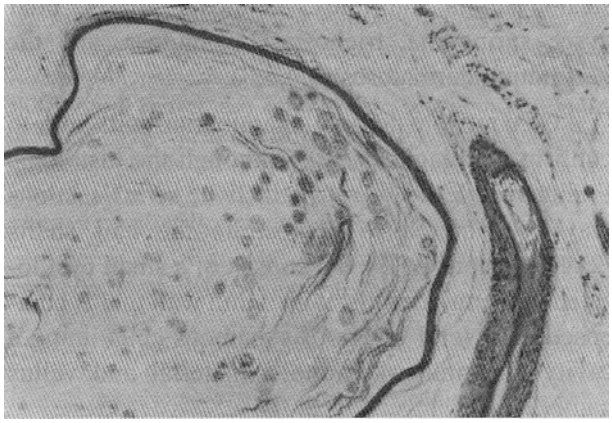

Figure 3. Cyst lined by squamous epithelium and within laminated keratinous materials and vellus hairs (H&E X 100).

Discussion

EVHC are characterized by relatively abrupt onset of flesh-colored, reddish-brown or brown-black colored, small, soft, smooth asymptomatic papules with a crusted or umblicated surface. The condition is usually seen in children and young adults, but can develop at any age (1-5,7).

They are not consistently associated with prior trauma to the area nor with any local or systemic abnormality (2). Lesions most commonly affect the anterior aspect of the chest and extremites (7,8). However, they have been reported on the extansor arms, forearms, anterior thigh, trunk, parasternal areas, forehead, ears, neck, axilla, groin and eyelids (2,5,9,10). In our patient the color of the lesions was purple brown and the localization was limited to chest and abdomen. The condition is most commonly asymptomatic, but lesions may be pruritic or tender (4). Our patient did not have any complaint.

Like the lesions themselves, the natural history of EVHC may also be variable. The majority of cases persist for years without signs of regression, though spontaneous resolution may occur over a period of months to years (2).

It has been suggested that lesions resolve via penetration of the vellus hairs through the cyst walls followed by formation of an intracutaneous

foreign body reaction and transepithelial elimination (4,5).

The coincidental association of neurologic disease with EVHC has been reported previously (6). We could not find an association with any neurologic disease.

If a young patients presents with numerous soft, small, asymptomatic, flesh-colored to pigmented cysts on the anterior chest, the diagnosis is obvious (2).

There are no significant clinical differences between EVHC and many disorders such as acneiform eruptions, acne vulgaris, millia, folliculitis, acne rosacea, adenoma sebaceum, drug induced acneiform eruption. Also, the differential diagnoses include epidermoid cysts, multiple adnexal tumors, steatocystoma multiplex, keratosis pilaris, pilar cysts, syringoma, trichostasis spinulosa, and the perforating dermatoses (2,4,5,8).

Of course histologic examination will help to confirm the diagnosis (2). Although the histologic findings in EVHC are distinctive, serial sections may be required to demostrate the hair shafts (2).The lesions of EVHC consist of a small cyst located in the middermis, with a thin wall that is composed of several layers of squamous cells lining a cavity containing keratinous material and vellus hairs (2,3,8).

Watson noted that the expression of small hairs mixed with yellow keratinous material from an incised cyst will reliably suggest the diagnosis (2).

Patients with unusual or refractory acneiform eruptions may have EVHC. For this reason, biopsy may be helpful in establishing a correct diagnosis and determining proper treatment (4).

Although EVHC is a benign and usually asymptomatic disorder, patients often request treatment for cosmetic reasons (2,4,7). But treatments to date have been of only minor benefit (7). Although several authors reported that they had succesful results with treatments such as topical 12% lactic acid, topical retinoic acid and 10% urea cream in some of their cases (11-13), we couldn't observe clinical improvement in our patient after topical tretionin and urea cream treatment. Oral vitamin A, surgical excision, currettage, light electrodesiccation, carbon dioxide laser vaporization are other medical approaches (2,4,7,9,14).

In conclusion, review of the literature suggests that EVHC is not a rare disorder, but its frequency is probably underestimated due to paucity of symptoms and confusion of with other disorders (15).

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