Bilateral pilomatricomas of the brow region in a female

Sir,

Here, we report a case of bilateral pilomatricoma of the brow region. We believe that this case is unique because of the bilateral involvement of this area. Multiple pilomatricomas are rare and are mostly associated with other conditions.\textsuperscript{[1-4]} This case did not have any associations.
Letters to the Editor

The patient is a 20-year-old female who presented with bilateral nodules of the brows since the last 1 year. The right nodule was 1.5 x 1 cm and the left nodule was 1 x 1 cm in size [Figure 1]. They were firm on consistency but were mobile on the underlying structures. The overlying skin was normal in appearance. Her family history for the same condition was negative. She did not report any other disorder or any history of trauma. Routine laboratory tests were normal. The clinical differential diagnosis included epidermal cysts, pilar cysts and pilomatricomas. Fine needle aspiration was performed but no aspirate was achieved. Total excision of one of the nodules was performed. Histopathologic evaluation revealed irregularly shaped islands of epithelial cells. Two types of cells, basophilic cells and shadow cells, comprised the islands [Figure 2]. Thus, the diagnosis of pilomatricoma was confirmed. Excision of the other nodule showed the same changes.

Pilomatricomas arise from the hair follicle matrix cells. This tumor makes up around 20% of all hair follicle-related tumors. The majority of the patients are under 20 years of age, and females are affected more often than males. The tumor presents as a solitary, firm, painless, dermal or subcutaneous mass. It slides freely over the underlying tissue and the overlying skin has a reddish or blue hue in about 24% of the patients. On stretching the overlying skin, it may show the “tent sign” with multiple facets and angles. Pilomatricoma most commonly occurs in the head and neck, with cervical, temporal, eyelid and preauricular regions being the most frequently reported locations. Growth is usually slow and benign. The tumor diameter ranges from 0.5 to 3 cm. A malignant variant with distant metastases has been described.

Pilomatricomas are generally solitary tumors; multiple tumors occurring synchronously account for 2–3.5% of those reported. Multiple or recurring tumors may be found in association with Gardner syndrome, myotonic muscular dystrophy, sarcoidosis, skull dysostosis, Rubenstein–Taybi syndrome and Turner syndrome.

In the differential diagnosis, it may be necessary to rule out midline dermoid cysts in the neck, parotid tumors in the preauricular region and adenopathy, calcified hematoma and lipoma in other sites. Pilomatricoma should be differentiated from epidermal and dermoid cysts.

Histopathologically, the tumor is sharply demarcated. Embedded in a rather cellular stroma, irregularly shaped islands of epithelial cells are present. As a rule, two types of cells, basophilic cells and shadow cells, comprise the islands. Shadow cells are enucleated and are formed by keratinization of the basaloid cells, which decrease in number as the neoplasm ages. With the von Kossa stain, calcium deposits are found in approximately 75% of the tumors. Areas of ossification are seen in 15–20% of the cases. Sometimes, melanin deposition and transepidermal elimination have also been described. For definitive diagnosis and because spontaneous regression is never observed, complete surgical excision is the treatment of choice.

Fatemeh Shaikhani, Sarah Hashemzadeh, Arash Ayoubi
Department of dermatology of Imam Khomeini hospital, Jondi Shapur medical university of Ahwaz, Iran
Eruptive vellus hair cysts (EVHC) are unusual developmental abnormality of vellus hair follicles.[1] Diagnosis is generally made by clinical presentation and confirmed with punch biopsy and histological examination. Recently minimally painful or painless, nonscarring techniques have been described.[2] We report a 10-year-old girl diagnosed as EVHC with an alternative method.

A 10-year-old girl presented with generalized papular eruption. The skin lesions initially appeared on anterior chest two years ago and then spread to upper and lower extremities. The number of lesions gradually increased. She had no subjective symptoms. Her past medical and family history was unremarkable. Dermatological examination revealed multiple, smooth, soft, fresh colored, 1 to 3 mm, follicular papules on the anterior chest, upper and lower extremities [Figure 1]. The rest of her cutaneous examination was within normal limits.

The clinical diagnosis of EVHC was made. The cysts were relatively superficial and therefore we attempted an alternative method to support the diagnosis. After local application of anesthetic cream containing lidocaine and prilocaine (EMLA® cream, Astra-Zeneca, Turkey) for an hour; a tiny incision was performed on the top of a lesion and cystic material was gently squeezed. Microscopic examination of the cystic material in a 10% potassium hydroxide preparation demonstrated numerous vellus hairs [Figure 2]. A skin punch biopsy was performed to confirm the diagnosis. Histopathological findings demonstrated a cystic structure lined by squamous epithelium in the lower dermis. Vellus hairs and laminated keratinous materials were present within the cyst; no sebaceous structure was seen within the cyst wall [Figure 3]. These findings were consistent with EVHC. The patient refused the mechanical treatment option so she was treated with topical tretinoin. There was no evidence of clinical improvement even after two months of the treatment.

EVHC presents on the chest and extensor or flexor surfaces of the extremities. The lesions have been described as skin colored macules or papules, ranging in size from 1 to 5 mm and numbering from 20 to 200. EVHC may be sporadic or be inherited in an autosomal dominant manner.[1,2] The clinical differential diagnosis includes steatocystoma multiplex, trichilemmal and dermoid cysts, comedones of acne, keratosis pilaris, perforating disorders, folliculitis, syringomas, milia, and molluscum contagiosum.[1,3] Trichostasis spinulosa (TSS) is another important disorder in the differential diagnosis of EVHC. Protruding vellus cysts in TSS may be inapparent to naked eyes and the disease may clinically simulate EVHC.[4] Histological examination is essential to differentiate these similar skin lesions.[5] Clinical presentation is usually diagnostic for EVHC but sometimes the diagnosis should be confirmed with punch biopsy and histological examination. Nevertheless, punch biopsy can be both distressing and painful, and may leave an unpleasant scar.[2] In the present case, we used an alternative method to support the clinical diagnosis. A similar technique was reported by Sardy and Karpati. The author utilized a sterile, large (18 Gx2) blood-collecting needle to aspirate cystic contents from anesthetized skin.[3] Recently Kaya et al.[5] reported a different technique, which is also used for treatment. After puncturing the overlying skin using the sharp-tipped cautery point, they grasped the base of the cyst using a standard dissecting forceps and they extracted the cysts out.[5] These techniques are less invasive methods than punch biopsy.

REFERENCES