

## Eccrine Hidrocystoma Successfully Treated with Topical Synthetic Botulinum Peptide

Sir,

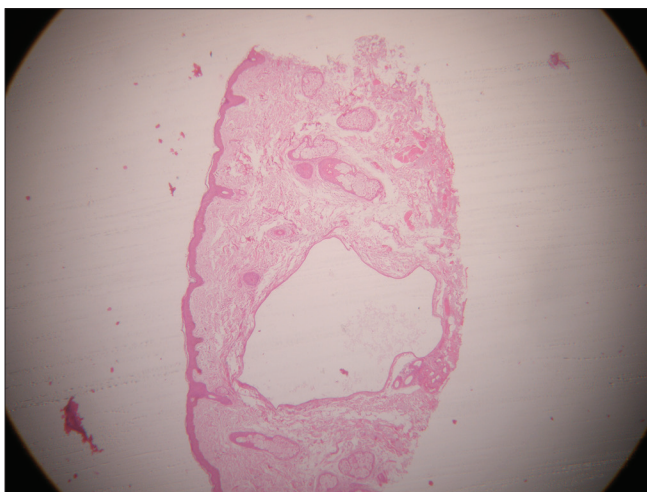
Eccrine hidrocystomas (EHs) are benign cystic lesions of eccrine ducts that are associated with a chronic course and seasonal variations. They are more frequent in females than in males.<sup>[1]</sup> Solitary EH can be treated easily by surgical excision; however, the treatment of multiple lesions is problematic. We report a case of multiple eccrine hidrocystomas over the face, which responded completely after 4 weeks of treatment with topical Botulinum Toxin (Boxtlak-BL) like preparation.

A 60-year-old Indian lady presented with multiple papules over the cheeks since last 5–6 years, which were persistent and aggravated in summer and on exposure to heat. On local examination, there were shiny, translucent papules of 1–3 mm in diameter on the centrofacial area. On puncturing with a disposable needle, clear watery fluid came out. A skin biopsy stained with haematoxylin and eosin showed dilated cystic spaces in upper dermis [Figure 1], which were unilocular and lined by flattened squamous epithelial cells in two layers. There were no myoepithelial cells in the cyst wall. There was no evidence of decapitation secretions in the lining cells.<sup>[2]</sup> Based on clinical features and histopathology, a diagnosis of multiple EHs was made. The patient was treated with topical Boxtlak-BL twice daily and there was almost complete clearance of lesions after 4 weeks of treatment [Figures 2 and 3].

EH is a benign cystic condition of eccrine sweat ducts.<sup>[3]</sup> The

aetiopathogenesis is still debatable. Electron microscopy has established that the cyst wall is composed of ductal cells. It is likely that obstruction of eccrine duct leads to retention of sweat causing flattening of the lining cells and cystic dilatation.

Treatment of EH is recommended for cosmetic reasons. Different modalities have been proposed with variable results, which include puncture and drainage of the cyst that gives transient improvement with an early recurrence,<sup>[4]</sup> surgical excision,<sup>[4]</sup> microdermabrasion and electrodesiccation with high risk of scarring,<sup>[5]</sup> pulse dye laser,<sup>[6]</sup> topical atropine<sup>[7]</sup> and scopolamine.<sup>[8]</sup> Recently



**Figure 1:** Dilated unilocular cystic spaces lined by two layers of squamous epithelial cells without any evidence of decapitation secretions, (H and E, ×40)



**Figure 2:** Multiple eccrine hidrocystomas over the left cheek before treatment



**Figure 3:** After 4 weeks of topical treatment with Boxtlak-BL cream

EH has been treated with botulinum toxin (injectable) with good results.<sup>[9]</sup>

Botulinum toxin (Boxtlak-BL) is a potent neurotoxin that blocks cholinergic nerve terminals. It has been used in the treatment of blepharospasm, strabismus, torticollis, hemifacial spasm and other dystonias.<sup>[10]</sup> It has also been used in the treatment of hyperhidrosis<sup>[11]</sup> and facial wrinkles. Boxtlak-BL containing BoNT\_L peptide significantly inhibits SNAP-25 (synaptosome-associated protein of 25 kd)<sup>[12]</sup> of SNARE complex thereby inhibiting the release of acetylcholine from vesicle within the cytoplasm of the motor nerve endings. The end result is chemodenervation of cholinergic nerves targeting the autonomic control of eccrine sweat glands.

We propose topical Botulinum toxin like peptide as a painless, non-invasive, cost-effective and safe technique for the treatment of multiple EH with excellent results.

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