Basaloid Follicular Hamartoma: Case Report and Novel Cosmetic Treatment
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Introduction
Basaloid follicular hamartoma (BFH) is a rare, benign, neoplasm of the hair follicle, characterized by multiple brown papules typically involving the face, scalp, and trunk.1 Diagnosis is made histologically via biopsy, which is important in order to distinguish BFH from basal cell carcinoma (BCC) or other epithelial neoplasms with malignant potential. Correct diagnosis allows for avoidance of unnecessary surgeries to remove benign lesions and prompt management of potential malignancies.

Case Description
A 68 year old male presented to Dermatology seeking cosmetic treatment for hundreds of homogenous, waxy, verrucoid, brown papules on his face. The patient stated they had been present for years and had recently been increasing in number. The patient had not sought any prior treatment but found them cosmetically bothersome. There was no history of myasthenia gravis and no physical exam findings such as palmar pitting or alopecia to indicate generalized type. (Figure 1)

Figure 1 Right temple before treatment with PDL

Discussion
Clinically, most cases of BFH present with multiple 1-2mm tan to brown colored papules located on the face, scalp, neck, axilla, trunk and pubic area.1,4

Five types of BFH have been described in the literature: 1) Solitary or multiple papules 2) Localized linear papule/plaque 3) Localized papule with associated alopecia; 4) Generalized papules associated with myasthenia gravis and alopecia 5) Generalized autosomal dominant familial type without associated disorders.3,4,5,6,7

The patient in this case was deemed to have the multiple papules type, as he had no other relevant signs or symptoms and no family history that might place him in another subtype.

BFH arises due to a mutation in the patch (PTCH) gene located on chromosome 9q23, the same gene thought to cause nevoid basal cell carcinoma syndrome.4 Expression of the mutation is thought to milder in BFH, as these are benign tumors.4,8

Conclusions
Treatment options for BFH are limited and no standard of care has been determined. There are reports of 5-aminolevulinic acid plus photodynamic therapy as a safe and mildly effective cosmetic treatment for BFH, and this is the treatment of choice in children.1 Our patient was treated with Pulsed Dye Laser (PDL). The right temple had 1 treatment with pulse duration of 1.5msec and 10J cryogen. At 2-month follow-up (Figure 2), the patient had significant cosmetic improvement.

PDL has traditionally been used to treat vascular lesions such as port-wine stains, but has also been used for acne, scars, and photorejuvenation. While the mechanism is unknown, PDL may work secondary to its destructive effect on the surrounding vasculature supplying the neoplasm, thereby reducing the nutrients available to the affected cells. It also may target the chromophore of melanin, causing selective photothermolysis of BFH cells.9,10,11

More research is needed to find effective treatments for BFH, as these lesions can be cosmetically bothersome to affected individuals. However, the authors postulate that PDL may be a safe and effective treatment for BFH, and possibly other adenexal neoplasms.

References