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FOCAL EPITHELIAL HYPERPLASIA (HECK'S DISEASE): A CASE REPORT

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### FOCAL EPITHELIAL HYPERPLASIA (HECK'S DISEASE): A CASE REPORT

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#### **ABSTRACT**

A case is presented of Focal Epithelial Hyperplasia (FEH) manifesting in an 11 -year- old girl. An appraisal of the intervention modalities is briefly reviewed.

#### INTRODUCTION

Focal Epithelial hyperplasia (FEH) is an asymptomatic proliferation of the oral mucosa and was first described in the English literature by Archard et al. (1965) in the Native American population<sup>1</sup>. It is mostly found in children and adolescents with a female preponderance<sup>2</sup>. However, the disease has also been reported in some adults<sup>3</sup>. The condition is frequently seen in certain geographic locations and has also been shown to have a familial tendency. The Human Papilloma Virus (HPV) infection, particularly by subtypes 13 and 32 has been closely associated with the condition<sup>3</sup>. Other associated factors include malnutrition, poor hygiene and genetic susceptibility<sup>4</sup>.

The disease presents as multiple, soft sessile papules and nodules measuring 1-10mm in diameter. While the colour is similar to that of the adjacent mucosa, the lesions could be pale sometimes. These lesions can involve both keratinized and non-keratinized surfaces and are frequently seen in the lips, labial and buccal mucosa

and the tongue<sup>3</sup>. While they are benign in nature and usually asymptomatic, they can significantly reduce the quality of life since large lesions could affect masticatory efficiency and compromise the aesthetic profile.

Diagnosis is based on clinical grounds and treatment is most often not indicated since most of the lesions regress spontaneously and there is no tendency for malignant transformation. Management of these lesions is usually for esthetic and functional purposes<sup>3,4</sup>. Only one study has reported FEH in a Kenyan population<sup>5</sup>. In the present communication we present a case of FEH manifesting in the labial mucosa of an apparently distressed 11-year -old girl.

# **CASE REPORT**

An 11 - year - old girl complaining of swellings in her lower inner lip and the inner side of her cheek presented to our clinic accompanied by her father. The patient reported that she had first noticed the lesions about seven months previously.

The lesions were painless, but she reported some discomfort when brushing her teeth. Her medical history was non-contributory, and her father denied any presence of similar lesions in other family members. Intraoral examination revealed multiple smooth and soft, sessile papules and, nodules clustered together while scattered in some areas. The lesions involved the lower labial and left and right buccal mucosa [Fig.

1]. Neither ulceration nor inflammation was evident. The lesions ranged in size from 2-10mm in the largest diameter. Based on the history and clinical examination, a diagnosis of FEH was made.

The patient was reassured about the benign nature of the lesions and placed on a regular follow up schedule after every month. She was also given oral hygiene instructions as well as dental prophylaxis.



Fig 1. Distribution of lesions on the lower lip and buccal mucosa.

### **DISCUSSION**

FEH also known as Heck's disease is a benign oral mucosal lesion that causes epithelial proliferation which is thought to be induced by the Human Papilloma Virus (HPV) subtypes 13 and 32<sup>3,4</sup>. According to the literature, three cases have been reported in Kenya<sup>5.</sup> Children and young adults are mostly affected with female preponderance. The disease may show a familial tendency which could be related to either familial genetic susceptibility or HPV transmission among family members. It is also associated with mucosal infection by HPV subtypes 13 and 32, malnutrition and poor oral hygiene<sup>4,7</sup>. In our patient there was poor oral hygiene that could have been associated with the lesions. FEH is also associated with immunosuppression such as in HIV positive individuals.

Clinically, the disease presents as multiple asymptomatic exophytic soft, flattened or rounded papules or nodules often clustered and of the same colour as the neighboring healthy mucosa. These lesions can be seen in the labial, lingual and buccal mucosa, gingiva, tongue and palate<sup>5,6</sup>. Diagnosis is based on clinical finding of the characteristic lesions as in the present case. However, histopathologic examination may indicated to distinguish the lesions from similar lesions. The differential diagnosis for FEH may include squamous cell papilloma, verruca vulgaris, condyloma inflammatory fibrous acuminata, hyperplasia and Cowden's syndrome<sup>6</sup>. Histopathology shows squamous epithelium with regional parakeratosis, acanthosis, vacuolization of epithelial cells (koilocytes), broad and elongated rete pegs<sup>5</sup>. Most of the lesions regress on their own spontaneously

and, therefore, treatment is often not required other than regular follow - up of the patient<sup>7</sup>. This is the protocol that was followed in the management of our patient. The lesions that do not regress and those that interfere with masticatory efficiency in addition to those that compromise aesthetics may be excised. Various methods of excision are available including scalpel surgery, cryotherapy, carbon dioxide laser and electrocoagulation. Use of chemical agents such as retinoic acid and imiquimod to manage the lesions has been suggested by some authors<sup>6</sup>. Notably, these lesions do not show any tendency for malignant transformation<sup>7</sup>. However, recurrence is not predictable and, therefore, the importance of following - up patients with FEH cannot be overemphasized.

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