FOCAL EPITHELIAL HYPERPLASIA (HECK’S DISEASE) IN THREE KENyan GIRLS: CASE REPORTS

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SUMMARY

We report the first three patients diagnosed with focal epithelial hyperplasia (Heck’s disease) in Kenya. Clinically they presented as focal or diffuse papillomatous lesions in the oral mucosa. Histopathological features rule out other similar lesions inter alia multiple fibro-epithelial and viral warts.

INTRODUCTION

Focal epithelial hyperplasia (FEH) also referred to as Heck’s disease presents as multiple papillomatous lesions, usually with a sessile base. It is a rare benign condition associated with a variety of papilloma viruses which can affect both animals and man(1). The frequently affected areas include the lower lips, buccal mucosa, commissures, upper lip and tongue, in that order(2). Contrary to previous claims(2,3), there is growing evidence that ethnic predilection does not probably exist. In this regard already two cases have been reported from Sudan(4,5). We report the first three cases of FEH diagnosed in Nairobi, Kenya.

CASE REPORTS

Case 1: An 11-year-old female was referred to us from a district hospital for evaluation and treatment of “multiple raised lesions” on the oral mucosa. The lesions had first been noticed by her mother 8 months before presentation. Her past medical history was not indicative of any systemic disease. On examination, painless multiple papillomatous lesions with varying characteristics ranging from sessile to pedunculated bases were evident. The lesions were soft in consistency and of the same colour as the rest of the mucosa. The sizes ranged from 1.5 mm to 3.5 mm in the longest axis. They occurred singularly and in clusters on the lips, buccal mucosa and dorsum of the tongue (Figure 1).

Case 2: An 8-year-old girl was referred to us regarding “suspicious oral lesions” on the mucosa. The lesions had first been noticed 10 months earlier following which she was referred to a dermatologist. She had been placed on “Acyclovir (Zovirax) cream and Povidine-iodine (Betadine) mouth rinses for an unknown duration with no improvement, hence the second referral.

The family history was positive of similar lesions in one of her grandmothers. Clinical examination revealed lesions similar to those observed in case 1.

Case 3: A 12-year-old female was referred from a private practitioner for investigation and management of painless multiple soft papillomatous growths on her oral mucosa. The growths had first appeared when the patient was 5 years of age. Initially one growth was noticed in the mucous membrane of the right lower lip followed by a similar growth on the left side. In the course of time many other swellings appeared.

Figure 2

Histological section depicting a stratified squamous epithelium with irregular rete ridges covering a relatively low vascular stroma. (Haematoxylin and Eosin. Original magnification x 200).

Intraoral examination revealed multiple clusters of polypoid growths in the mucous membranes of especially the lower lip. These lesions were similar to those seen in the other two cases. No other family member had had a similar affliction.

Histopathology: Histopathological examination of all the three cases revealed parakeratinized and acanthotic or hyperplastic squamous epithelium with long or broad and sometimes anastomosing rete ridges overlying low vascular cellular stroma with minimal chronic inflammatory cells (Figure 2). A higher magnification view of the cells within the stratum malpighi showed the presence of cells in the once called "mitosoid degeneration" (Figure 3).

DISCUSSION

Whilst there are other conditions that clinically mimic FEH, namely multiple fibro-epithelial polyps, oral viral warts and multiple fibromas, histopathological features of the three cases in this report conformed with those of FEH.

Histopathological conditions, which may mimic FEH include papillary hyperplasia of the palate, benign rhomboid glossitis, discoid lupus erythematosus, granular cell myoblastoma, necrotizing sialometaplasia and juxta-oral organ of Chievitz. In these conditions, the term "pseudo-epitheliomatous hyperplasia" refers to their tendency to masquerade as malignant because of their histologically deep infiltrations of rete ridges into the connective tissue stroma. During histological sectioning of specimens in such lesions, the cross-sections usually reveal round epithelial islands of the rete ridges which may exhibit rests of keratin and mitotic activities that may mimic squamous cell carcinoma. However, in FEH the infiltrating rete ridges do not consistently run as deeply as those seen in the preceding conditions; and the presence of "mitosoid degeneration" seen in cells in the stratum malpighi in FEH is also considered diagnostic of the condition.

Notwithstanding the fact that oral lesions are known to be important manifestations of some systemic conditions, i.e. syphilis, it is of some concern that little is known about their prevalence in our region. Although differences in the incidence of FEH in ethnic populations have been reported, with a relatively common occurrence in American Indians and Eskimos, a comprehensive pattern of occurrence of these lesions among African populations is yet to be reported. It may be interesting to note that two of our cases came from the same African ethnic group. So far, however, no familial or any other genetic pattern of occurrence has been established even among the large series hitherto reported.

While no obvious systemic conditions were elucidated from the three patients, it is interesting to note that FEH could be associated with HIV infection. Nevertheless, FEH lesions are known to have a viral origin and could regress spontaneously though the duration is unestablished. Further, it should be borne in mind that oral lesions are not always pathognomonic of underlying systemic conditions. As such thorough physical examination and other necessary investigations should be carried out to establish a definite diagnosis.

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REFERENCES