

Gingival hairs – A rare case report

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Abstract: *The oral cavity reveals many developmental defects of the ectoderm. However, the occurrence of oral hair has rarely been reported in the literature. No fully justified explanation can be offered for the occurrence of oral hair, which seems to be a developmental defect. Published reports on the subject to date have described the existence of single hairs discovered in healthy persons. A case of unusual hair in gingival sulcus is presented*

Keywords: Gingival hair, Ectopic, Heteropia.

1. Introduction

The oral cavity reveals many developmental defects of the ectoderm. However, the occurrence of oral hair has rarely been reported in the literature. We have encountered only three cases in our review of the literature. The first, described by Baughman and Heindrich [1] in 1980, was seen in a 45-year-old man; the second, reported by K. Fetkowska-Mielnik [2] in 1986, was seen in a 13-year-old boy with alopecia areata; third reported by Farzaneh Agha-Hosseini [3] in 2006, was seen in 11 year old boy. Anomalies of this kind are rarely found in the oral cavity. Therefore, the finding of oral hairs in a 19-year-old boy seems to be worth presenting.

2. Case report

A 19-year-old boy reported to the Department of oral & maxillofacial surgery. Examination of the oral cavity revealed numerous hairs extending from the gingiva in the upper left front quadrant of the dentition. These hairs were 8 to 9 mm long; they were black in color originate from labial gingival sulcus of 22,23 tooth (Fig.-1). The oral hairs had been detected by the patient 4 year before he reported to us. He used to remove these hair with vigorous tooth brushing due to which there were area of cervical abrasions corresponding to these teeth. Since they did not inconvenience him in any way, he did not try to remove them. On a follow-up visit, some hairs were removed with tweezers. After 2 months the hairs reappeared in the region from which they had been removed. A hair removed from gingival area along with the surrounding mucosa and examined histologically. (Fig 2)



Figure 1 – gingival hairs in the labial sulcus of 22,23



Figure 2 – Biopsy specimen

3. Histopathological findings-

Specimen was fixed in formalin 1:9, then dehydrated, and placed in celloidin-paraffin. After being cut into 10-micron sections, they were stained with hematoxylin and eosin. Microscopic examination revealed that the gingival hair was covered with mucus. Histologic evaluation revealed parakeratinized squamous stratified epithelium of gingiva covering dense connective

tissue, in some parts with chronic inflammatory infiltration. Epithelium was hyperplastic and showed marked acanthosis in some areas. In lamina propria a hypercellular connective tissue was observed, and also some epithelial nests similar to epithelial rests of Serres were evident. In some epithelial rests, clear cells (which seem to be melanocytes) were seen. In deep parts of lamina propria nests of ectopic squamous cells were seen. In different areas, deep notches appeared from the surface of epithelium to basal layer, and these notches were completely adjacent to ectopic squamous islands (Fig.-3). Its cortical substance was less distinct and an oral hair papilla whose outer sheath lacks the typical multilayered epithelial structure and does not contain a generative layer, its cells being spindle shaped. The inner sheath is irregular, and the arrangement of cells in the cortex proper is ataxic. In histology of skin hair, a hair follicle and hair shaft is present. Hair follicle is an epidermal sheath that surrounds the hair. Sebaceous glands are usually attached to the side of a follicle, their oily secretion enters the follicle and follow it to the surface. The hair grows from the lower end of follicle. A hair is an elastic keratinized thread that develops from the epidermis. They may vary from 0.05 – 0.5 mm in thickness. The hair consists of epidermal cells arranged in three concentric layer i.e., the medulla, the cortex and the cuticle. In this case there was absence of sebaceous gland at the base of follicle, cortex was not well defined and all the three layers was not distinct.

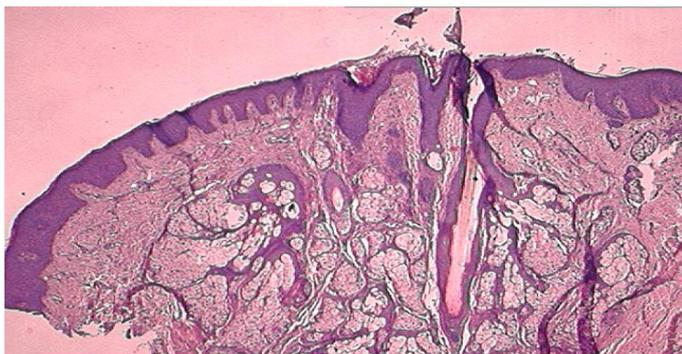


Figure 3 – Photomicrograph of the histological view

4. Discussion-

In personal communication we have never seen or heard of hair being detected in the oral cavity. Even Julia Pastrana, the famous “Bearded Lady” of the 1800’s, had no record of oral hair, although her entire body was covered with hair. Extensive records of her oral condition, including plaster models of her teeth have been preserved in the Odontological Museum of the Royal College of Surgeons in London city. She suffered from excessive gingival hyperplasia, but apparently no hair existed within the mouth. Some rodents have oral hair as a normal occurrence, but the condition is apparently limited in the animal kingdom. A case of hair occurring naturally in the mouth has been reported only thrice previously. A case of this rare anomaly is reported here. The terms ectopia, heterotopia, or aberrance of tissues, are used for the development of tissues in situations where they are not normally found [4]. For example, aberrant salivary glands have been reported in a variety of locations, including the middle-ear cleft, external auditory canal, neck, posterior and anterior mandible, pituitary, and cerebellopontine angle. These are usually incidental findings and do not require intervention [5]. In the case described in this article numerous oral hairs occurred in a

patient. The finding of naturally oral hair is certainly rare. It is puzzling why ectopic sebaceous glands are so common in the oral tissues [4]. In gingival connective tissue, copious remnants of dental lamina were seen. In parts of the gingivae where hair-like structures have been seen, those remnants transformed to prickle cells and gradually appeared as spindle cells with dense nuclei and eosinophilic cytoplasm adjacent to those hair-like structures.

5. Conclusion

It seems that this ectopic phenomenon maybe a mutation in the gingival tissue. Whatever the cause, this phenomenon is extremely rare.

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