



# Treatment of an Aberrant Intraoral Hair with Er,Cr:YSGG Laser: A Case Report

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## ABSTRACT

Occurrence of hair in the oral cavity is an extremely rare phenomenon. 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 1800s, had no record of oral hair, although her entire body was covered with hair. She suffered from excessive gingival hyperplasia, but apparently no hair existed within the mouth. A thorough review of literature reveals only four reported cases of oral hair. The present case was of a young man who, on oral examination, revealed a single black hair on the floor of the mouth near the lingual frenulum. Because of the extreme rarity of such cases, it is interesting as well as important to report and further study their relevance.

**Keywords:** laser; oral hair; intraoral hair; lingual frenulum, ectopia, aberrance.

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A review of literature relative to the existence of developmental hair in the oral cavity revealed only four cases. These were reported by Miles in 1960,<sup>1</sup> Baughman in 1980,<sup>2</sup> Fetkowska-Mielnik et al in 1986,<sup>3</sup> and Agha-Hosseini et al in 2007.<sup>4</sup> Even Julia Pastrana, the famous "Bearded lady" of the 1800s, had no record of oral hair, although her entire body was covered with hair.<sup>5</sup> 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 to non-humans.<sup>1</sup> Because of the extreme rarity of this anomaly, the following case is presented.

The Er,Cr:YSGG hydrokinetic system laser with a wavelength of 2780 nm, frequency of 20 Hz, pulse energy between 0 and 300 mJ, has FDA approval for several soft tissue procedures such as gingivectomy, gingivoplasty, fibroma removal, and granulation tissue removal. It works according to the hydrokinetic system theory, and the focal distance is approximately 1.5 mm



**Fig 1** Single hair on the floor of the mouth near the lingual frenulum.



**Fig 2** Removal of the intraoral hair using Er,Cr:YSGG laser.



**Fig 3** Postoperative view (1 year).

away from the tissue. The water droplets of the water spray are energized by laser energy 1.5 mm from the end of the tip; thus, the most focused distance while working with Er,Cr:YSGG laser is 1.5 mm from the tissue so that less thermal damage occurs.<sup>6</sup>

## CASE REPORT

A 21-year-old male presented to the Department of Periodontics and Oral Implantology, Maulana Azad Institute of Dental Sciences, New Delhi, for routine dental care. Upon examination of the oral cavity, a single dark brown hair measuring 6 mm was seen extending from the floor of the mouth near the lingual frenulum

(Fig 1). When an attempt was made to remove the hair, it was found to be not attached to any structure and apparently growing from the mucous membrane of the floor of the oral cavity. Interrogation of the patient revealed that he had been aware of the hair's presence since he was a teenager. His height and weight were normal. He had no systemic disease and was not taking any drugs.

The patient asked if the hair could be permanently removed, so the hair was removed using Er,Cr:YSGG laser (Fig 2). Topical anaesthetic gel was applied to the operation field. Patient and staff used special eye glasses for protection. The laser application was done with 600- $\mu$ m sapphire tips, 1.5 W power, 13% air and 9% water in noncontact mode to remove the hair along with the follicle. The operation field was wiped with sterile gauze soaked in 1% normal saline solution. A laser bandage was applied with 0.5 W power with air and water switched off. The patient was advised to avoid smoking, alcohol, and spicy foods. No analgesic was prescribed. The patient was followed-up for a period of 1 year and no recurrence was observed (Fig 3).

## DISCUSSION

The terms ectopia, heterotopia, or aberrance of tissues, are used for the development of tissues in situations where they are not normally found.<sup>7</sup> 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.<sup>7</sup>

The finding of naturally occurring oral hair is certainly rare. It is puzzling that ectopic sebaceous glands are so common in the oral tissues,<sup>8</sup> although their natural skin companion – hair – is so consistently absent. No explanation can be offered for this peculiarly common occurrence of one structure, with the almost universal absence of the other. Any attempted explanation would be sheer conjecture.

In this report, our patient was a young male, with a single hair present in the oral cavity which was growing from the floor of the mouth near the lingual frenulum and not apparently attached to any other structure.

It seems that this ectopic phenomenon maybe a mutation in the tissues. Whatever the cause, this phenomenon is extremely rare. Therefore, its etiology is unclear, but we can treat this problem with various modalities, ie, excision with a scalpel, electrosurgery, radiosurgery, or lasers. In our case, we used lasers because of less patient discomfort, better hemostasis, less postoperative discomfort, and better healing.

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