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# Background

- Infant Oral Mutilation (IOM) is a traditional practice that involves the removal of primary tooth buds, particularly in regions of Africa and among some immigrant communities.
- Historically IOM has been linked to beliefs that unerupted canine buds cause childhood illness.<sup>1</sup>
- IOM may lead to infections, malocclusion, missing teeth, and long-term oral health issues.
- This case emphasizes the importance for healthcare providers to identify IOM as a possible cause for aberrant canine development in the United States.

## **Case Presentation**

- **Patient:** 3-year-old Nepali male.
- **Chief Complaint:** "Missing lower tooth"
- **Medical History**. Nasolacrimal duct obstruction and several visits to the emergency department for infections related to the obstruction.
- **Clinical Findings:** Unerupted mandibular canine (tooth #R) with prominent labial bone expansion
- **Radiographic Findings:** 
  - Malformed, unerupted tooth #R with a discreet, artifactual-appearing enamel defect on the labial surface and aborted root development.
  - The findings were consistent with ectopic and aberrant tooth formation, most likely due to blunt trauma, without evidence of succedaneous tooth bud.

# Infant Oral Mutilation as a Potential Cause for Aberrant Canine Development: Case Report Hoffarth C<sup>\*1</sup>, Hilborn K<sup>1</sup>, Flaitz C<sup>2</sup>, Katebzadeh S<sup>3</sup>, Puranik C<sup>4</sup>



**Figure 1:** Clinical presentation of unerupted #R (black arrow) and bony expansion labial to and overlying #R (white arrow).



**Figure 2:** Periapical radiograph of malformed #R crown with aborted root development at baseline (A), 6 months (B) and 12 months (C).

#### Discussion

The malformed enamel appearance of tooth #R suggests that trauma was inflicted to the primary tooth bud. Trauma could be accidental or homeopathically induced (IOM).<sup>2</sup>

Clinical presentation of expansive bone also suggests a traumatic injury to the area, as no infections cysts/tumors are identified.

The family was provided with a Nepali interpreter, who can not confirm the use of traditional ritualistic practices.



# **Causes for Enamel Defects**

Mechanical trauma (intrauterine or birth related trauma, falls, accidents, or trauma associated with neonatal ventilation), culture-specific ritualistic oral mutilation, electrical burn, local infection, pre-eruptive intracoronal resorption (PIER)

## Conclusions

- IOM poses significant public health risks with longterm dental and medical consequences.
- While prevalent in Africa, its recognition is increasing in diaspora communities, including the U.S., due to immigration.
- Healthcare providers should consider IOM when diagnosing aberrant tooth and eruption, especially in unerupted canine teeth.
- The lack of definitive diagnostic tools makes a thorough and non-judgmental family interview important for accurate diagnosis and patient education.<sup>2</sup>
- Future research should focus on effective interventions, cross-cultural education, and collaboration between healthcare systems and traditional healing practices to improve outcomes for affected children.

## References

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- Anjum et al. (2022). Infant oral mutilation: Data collection, management, and public health guidelines. Br Dent J, 233(12), 1042–1046.