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Talon Cusp on a Permanent Maxillary Lateral Incisor Mimicking a Canine

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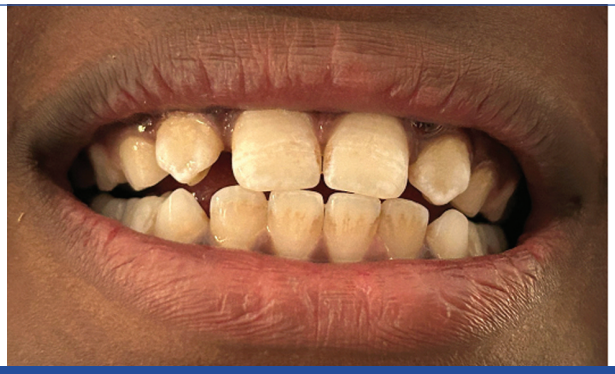
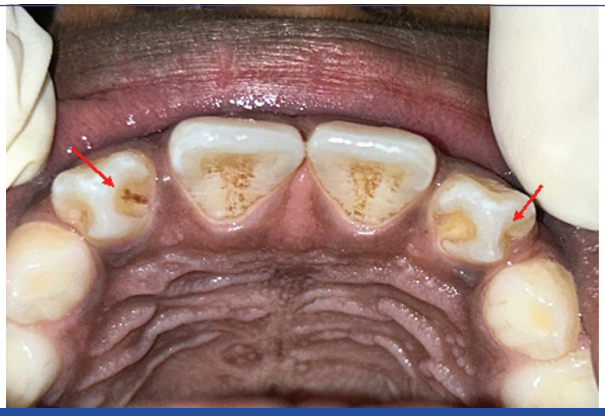
A nine-year-old male patient was examined, and an incidental finding of an unusual appearance of the lateral incisors was noted during a routine check-up at a community dental camp, unrelated to the patient's chief complaint. The maxillary right and left permanent lateral incisors resembled canines, with a pointed cusp tip and the appearance of mesial and distal slopes when viewed from the buccal aspect [Table/Fig-1]. The buccal surfaces of the teeth exhibited an irregular chalky white appearance with opacities following the perikymata, suggesting mild dental fluorosis with a Thylstrup-Fejerskov index score of 3 [1]. This score indicates smooth surfaces characterised by merging, irregular cloudy patches of opacity; perikymata are frequently observed between these opacities [2].



[Table/Fig-1]: Permanent maxillary lateral incisors appearing as canines from the buccal aspect.

The patient presented with no significant medical or dental history. There was no evidence of inherited dental abnormalities in the family history. The palatal surfaces of the maxillary permanent lateral incisors showed a prominent structure resembling a cusp extending from the cingulum region to the incisal edge [Table/Fig-2]. A mixed dentition was noted during the clinical evaluation.



[Table/Fig-2]: Talon cusp like anomaly seen on both right and left permanent maxillary lateral incisors from palatal aspect.

A raised prominence or protuberance on the affected tooth's surface that is composed of an outer covering of enamel and a core of dentin, which may contain a thin extension of pulp tissue, is known as dens evaginatus, an odontogenic developmental abnormality [3]. This prominence of the cingulum is also described as a talon cusp on anterior teeth. Exaggerated cingula, cusp-like hyperplasia, accessory cusps, supernumerary cusps, interstitial cusps, and palatal accessory cusps are some types of talon cusps. It is histologically and radiologically superimposed on the tooth on which it occurs and may involve enamel, dentin, and possibly pulpal extension. Additionally, it is observed in syndromes such as incontinentia pigmenti achromians, Ellis-van Creveld, Rubinstein-Taybi, and Sturge-Weber [4]. A talon cusp begins to form during the morpho-differentiation phase of tooth formation [5].

Compared to the primary dentition, it is more prevalent in the permanent dentition. The maxillary lateral incisor is more commonly affected in the permanent dentition, whereas the central incisor is more frequently affected in the primary dentition [6].

Depending on the shape, size, presentation, position, and tooth affected, the treatment of talon cusp whether conservative or radical must be carefully selected. The treatment should be based on radiographic evaluation. In some situations, if aberrant tooth morphology does not interfere with occlusion, treatment is not required [7]. The absence of radiographs in community dental camps limits treatment planning in present case. Treatment objectives for talon teeth should include ensuring pulp vitality, addressing both occlusal and aesthetic needs, and preventing caries or eliminating caries in developmental grooves [8].

To conclude, the presence of a talon cusp can interfere with occlusion and increase the risk of caries. Therefore, early detection of such developmental anomalies is essential for effective management and preserving both functional and aesthetic requirements.

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