RECOGNITION AND MANAGEMENT OF PALATO-GINGIVAL GROOVE: A HIDDEN TRACT IN THE MAXILLARY LATERAL INCISOR

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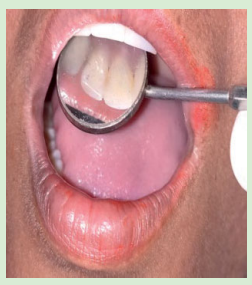
INTRODUCTION:

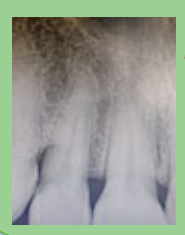
Palato-gingival groove (PGG) is a developmental anomaly. It acts as a plaque retentive site which can lead to endodontic or periodontal disease or combined periodontal -endodontic disease. Withers et al. observed that the prevalence of palato-gingival groove was 8.5%, among which 2.33% were in maxillary incisors. Most PGGs (93.8%) were in maxillary lateral incisors.

CHIEF COMPLAINT: A 32-year-old, systemically healthy female reported to the Department of Periodontology ,PGIDS , Rohtak with a chief complaint of dirty teeth.



CLINICAL PRESENTATION:

Probing depth at all sites were in range of 2-3mm except the maxillary right lateral incisor, where the disto-palatal aspect revealed 7mm probing depth and clinical attachment loss (CAL) of 5mm. Bleeding on probing was present . No mobility or tenderness was observed.

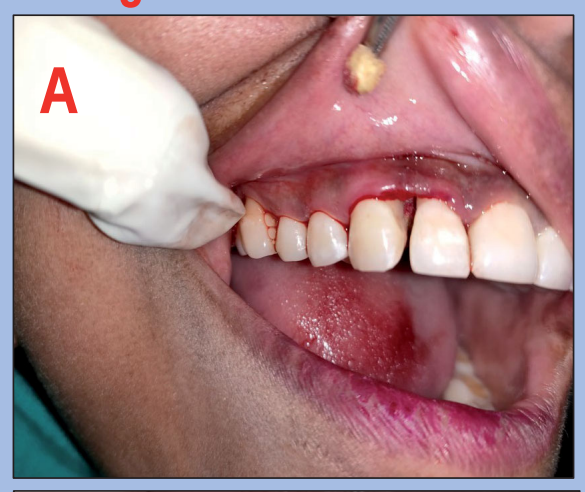


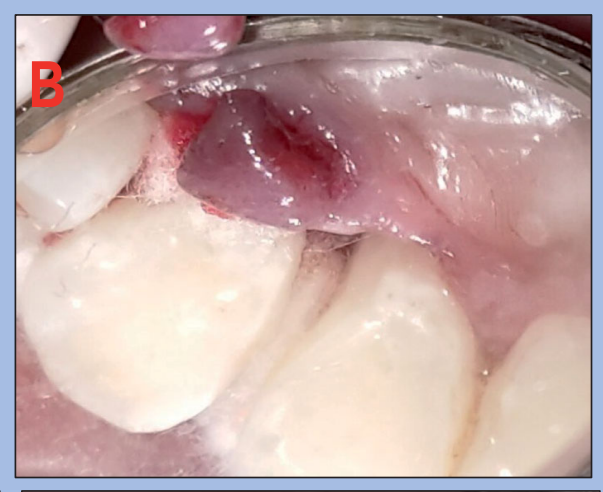
RADIOGRAPHICALLY : revealed an isolated bone defect associated with the distal aspect of lateral incisor.

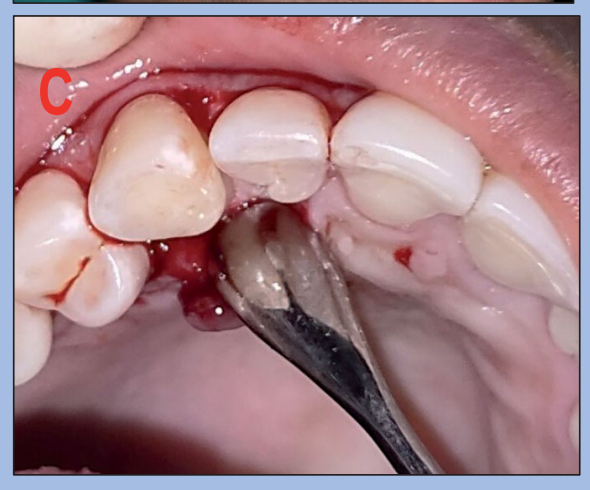
METHODOLOGY

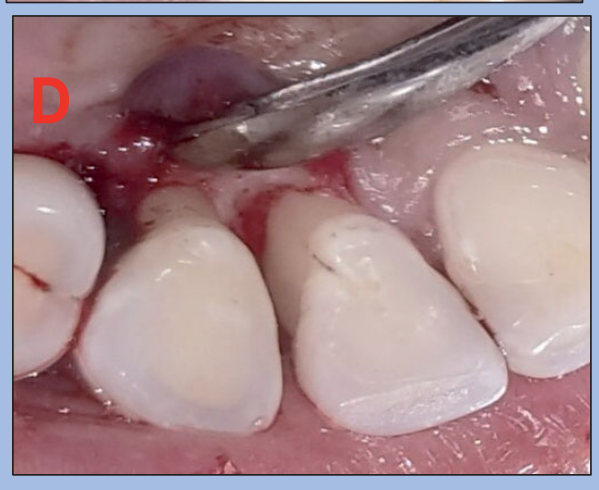
Surgical treatment

Non surgical treatment: Phase 1 periodontal therapy was given.



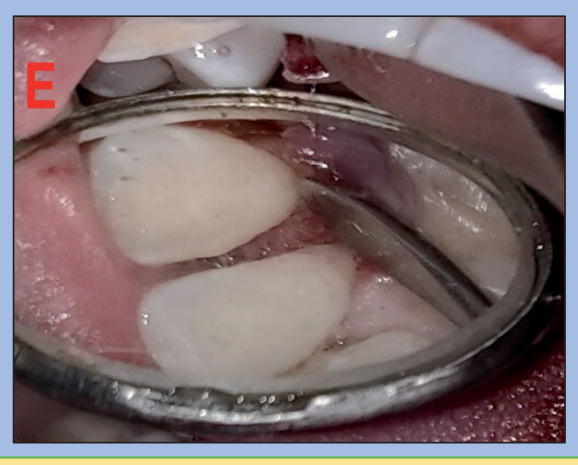


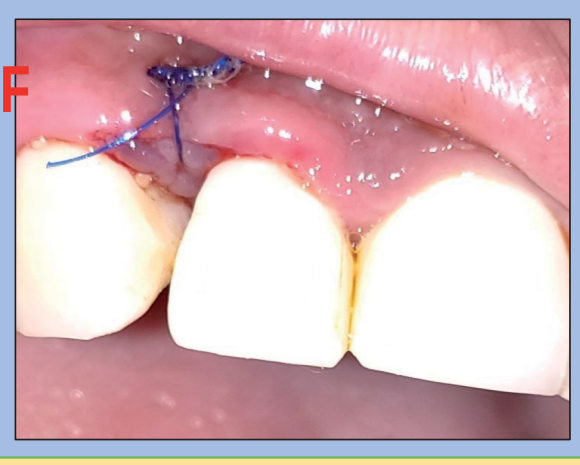


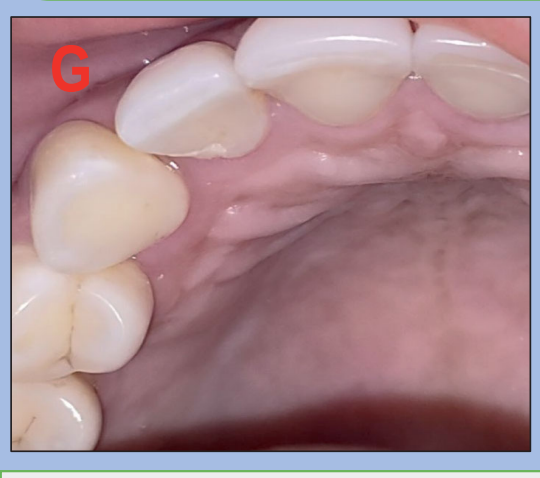


A,B,C,D

Modified papilla preservation technique was chosen and a full thickness flap was elevated to expose the groove. After raising the periodontal flap, a gingival groove extending to the junction of the coronal and middle third of the root was evident .







E,F

The groove was prepared and restored with GIC. Interrupted suture was given. Analgesics and antibiotics were prescribed.

G

At 6 months' follow up: **Probing depth reduced from 7 mm to 2mm; the gain in CAL was 5mm, and BOP was absent**

CONCLUSION: Eradication of plaque and sealing the groove are successful in management of palato-gingival groove. Early detection of palato-gingival groove is important as it can prevent further periodontal breakdown.

REFERENCES:

- Withers JA, Brunsvold MA, Killoy WJ, Rahe AJ. The relationship of palato-gingival grooves to localized periodontal disease. J Periodontol 1981;52:41-44.
- Kim HJ, Choi Y, Yu MK, Lee KW, Min KS. Recognition and management of palatogingival groove for tooth survival: a literature review. Restor Dent Endod. 2017 May;42(2):77-86.
- Lekshmi MS, Sharma S, Gupta SR, Sharma S, Kumar V, Chawla A, Logani A. Prevalence and radiological characteristics of palatogingival groove: A retrospective cone-beam computed tomography study in an Indian cohort. J Conserv Dent. 2021 Jul-Aug;24(4):359-363.