INTRODUCTION: The palatal groove is a developmental anomaly that predisposes the tooth involved to severe periodontal defects. These grooves are commonly seen on the palatal aspect of maxillary incisors. The significance of this defect lies in the fact that it has the potential to provide a pathway for bacteria to penetrate into the periodontal ligament area.

OBJECTIVE: To describe the use of Guided Tissue Regeneration as an adjunct to open flap debridement for the treatment of localized periodontal bone defect associated with a palatal groove.

MATERIAL METHOD: Case report of a deep groove running from cingulum to root on the palatal aspect of 22 with a probing depth of 8mm, grade 3 mobility and radiographic bone loss was also evident. Hence, a difficult to save tooth with a poor prognosis.

RESULTS: There was a significant reduction in pocket depth, and mobility was reduced to grade 1 after 3 months of follow-up.

CONCLUSION: Deep radicular grooves can be responsible for pulpal pathology and the establishment of combined endo-perio lesions. Therefore, it is critical to determine the extent of a palatogingival groove. Guided Tissue Regeneration based therapy is an effective regenerative procedure to improve the prognosis of a periodontally compromised tooth.

BIBLIOGRAPHY: