POLA RUGAE PALATINA SEBELUM DAN SETELAH DILAKUKAN PERAWATAN ORTODONSIA DENGAN PENCABUTAN

(PALATAL RUGAE PATTERNS FROM PRE- AND POST- ORTHODONTIC TREATMENT WITH EXTRACTION)

ABSTRACT

Background. Palatal rugae have important role in forensics odontology, as they are protected from trauma and high temperatures, because of their position in oral cavity. Palatal rugae have been implied to be unique for each individual and remain stable throughout life. However some study found that few factors can affect the stability of palatal rugae, such as orthodontic treatment, trauma, finger sucking and dentures wearing. Purpose. This study aims to determine changes in palatal rugae patterns of fixed orthodontic patients with first premolar extraction in Surabaya population. Method. Thirty-three orthodontic cases were selected with pre- and post- treatment casts. Landmarks on the palatal rugae were marked. Points were made on medial and lateral of first, second and third rugae. Each casts were measured with caliper. Results. In the pre- and post- treatment groups, changes in tranverse measurements were significantly different for lateral points third rugae and anteroposterior changes were significant for the distances between lateral points both first-second rugae and second-third rugae. All inter-point measurements of perpendicular median rugae were stable in post-treatment casts. Conclusion. This study shown that although some changes occur in the palatal rugae during orthodontic treatment, the morphology of palatal rugae remains stable through life. Thus, palatal rugae patterns may have an important role in forensic identification as a reference.

Key words: Palatal rugae, orthodontic treatment, extraction, forensic identification