KORELASI LEBAR LENGKUNG MAKSILA DENGAN AKTIVITAS OTOT MASSETER

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Correlation of Maxillary Dental Arch Width with Masseter Muscle Activity

Surabaya Javenese Population Studies

ABSTRACT

BACKGROUND: Dental Arch is the inclination of teeth, lips, cheek and tongue. Many factors that influence the growth of dental arch, one of them is masseter muscle activity. There is a relationship between muscle activity and craniofacial bone width directly affects on maxillary dental arch width. In a recent study showed that there is a significant correlation between changes in mechanical stresses provided by muscle and bone tissue changes in morphology. PURPOSE: To find the correlation between maxillary dental arch with masseter muscle activity in Surabaya Javenese Population. METHOD: This experiment was done by measuring maxillary dental arch and masseter muscle activity in 26 samples, consisting 13 men and 13 women. Masseter muscle activity measurements performed using electromyograph with surface electrode. The result was recorded and analyzed by Pearson test. RESULT: Analyzed with pearson test showed 0.019 at sig. 2 tailed and 0.455 at coefficient correlation. It means that there is a significant (sig 2-tailed<0.05) and positive (coefficient correlation +) correlation between maxillary dental arch with masseter muscle activity in Surabaya Javenese Population. CONCLUSION: The result of this study showed significant and positive correlation, the higher masseter muscle activity, the higher width value of the maxillary dental arch.

KEYWORDS: Maxillary dental arch, masseter muscle activity, Surabaya Javenese population.