

## ABSTRACT

Pratiwi, Norma Meyricha Sandi. 2014. **Comparison of Dental Arch Width, Arch Length and Palatal Height in Angle Class I Malocclusion with Protrusion and Angle Class II Division 1 Malocclusion.** Final Assignment, Dentistry Program, Faculty of Medicine, Brawijaya University. Supervisors: (1) drg. Neny Roeswahjuni, Sp.Ort. (2) drg. Fidyaa, M.Si.

During the growth of children to adulthood can cause the alteration of dental arch width, arch length, and palatal height. Angle class I malocclusion with protrusion and Angle class II division 1 malocclusion are an anomaly that can occur during the growth, both of them have a similarity that is a protrusion of the maxillary incisors with increased overjet, but the difference is relationship of the first molar permanent. This study has a purpose to compare dental arch width, arch length, and palatal height between Angle class I malocclusion with protrusion and Angle class II division 1 malocclusion. Observational study with anthropometric approachment has been performed on 60 model studies of girls over 15 years old, with the details 30 model studies of Angle class I malocclusion with protrusion and 30 model studies of Angle class II division 1 malocclusion. Independent samples t-test was used to test the measurement result. The results showed there was no significant difference ( $P > 0.05$ ) at the dental arch width between Angle class I malocclusion with protrusion and Angle class II division 1 malocclusion. However, there was significant differences ( $P < 0.05$ ) at the arch length and palatal height between Angle class I malocclusion with protrusion and Angle class II division 1 malocclusion.

Keywords: dental arch width, arch length, palatal height, malocclusion

