

PERBEDAAN JUMLAH KADAR NIKEL PADA PLAK PEMAKAI DAN NON PEMAKAI
PERANTI ORTODONTI LEPASAN (PENELITIAN EKSPERIMENTAL
LABORATORIS)

Rizkia, Reininta Sherly

KKA KK KG 107/10 Riz p
Prof DR Mieke Sylvia MAR drg MS Sp.Ort
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DENTAL PLAQUE

ABSTRACT

Crowded, irregular, and protruding teeth have been a problem for some individuals. The use of orthodontic appliances as the solutions has been a choice even since mixed dentition phase with removable appliances. Stainless steel alloy 18/8 which contain 18% chromium and 8% nickel is the most used material. Nickel is one of the materials that can caused allergy reaction. The use of orthodontic appliances with bad oral hygiene allows the dental plaque formation. Low dental plaque pH can influence nickel dissolve and rate released from orthodontic appliances. This research is aimed to find the difference of nickel concentration in dental plaque of user and non-user removable orthodontic appliances. 40 samples were taken and divided into two different groups. Nickel concentration in removable appliance users group higher than in non-users group. The results showed that there is increasing nickel concentration in removable appliance users. This differences occur because of nickel corrotion from the removable appliances.

Key Word: *Dental plaque, Nickel concentration, Removable appliances*