EFFECT OF GARGLING BAY LEAF DECOCTION WATER (Syzygium polynthum (Wight) Walp) ON SALIVA pH USERS OF ORTHODONTICS

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ABSTRACT

Background: *The use of fixed orthodontics can affect the state of the oral cavity and salivary pH which is one of the causes of dental caries. The lower the pH of saliva, the higher the risk of dental caries. Bay leaf cooking water as a mouthwash effectively inhibits the growth of Streptococcus mutans bacteria which play a role in the process of dental caries.*
Objective: *To determine the effect of gargling bay leaf decoction on salivary pH in users of fixed orthodontics.*
Methods: *This research is a pseudo-experiment with Pretest Posttest With Control Group design . The sample of this study was 80 respondents taken by accidental technique, 40 respondents as the experimental group and 40 respondents as the control group. Making bay leaf cooking water uses 10 grams (± 10 sheets) which have been dried for 4 days at room temperature then cleaned and boiled with 500 ml of distilled water to reach a temperature of 100ºC until the cooking water is reduced to 250 ml. Data analysis using Wilcoxon and Mann Wthiney tests .*
Results: *The degree of acidity (pH) of saliva before gargling bay leaf decoction water on acid criteria as much as 35%, neutral as much as 50% and base 15% and after gargling acid criteria as much as 2.5%, neutral as much as 67.5%, and base as much as 30%. With an average before gargling 6.75 and an average after gargling 7.33. Gargling bay leaf decoction water before and after is significantly different at p=0.000. Between the experimental group and the control group had a significant difference of p=0.000.*
Keywords: *salivary pH, mouthwash, bay leaf (Syzygium polyanthum (Wight)Walp.)*

PENGARUH BERKUMUR AIR REBUSAN DAUN SALAM (*Syzygium polyanthum (Wight*)*Walp.*) TERHADAP *pH* SALIVA PENGGUNA ORTODONTI CEKAT

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ABSTRAK

Latar Belakang : Penggunaan ortodonti cekat bisa mempengaruhi keadaan rongga mulut dan *pH* saliva yang merupakan salah satu penyebab karies gigi. Semakin rendah *pH* saliva semakin tinggi resiko terjadinya karies gigi. Air rebusan daun salam sebagai obat kumur efektif menghambat pertumbuhan bakteri *Streptococcus mutans* yang berperan dalam proses terjadinya karies gigi.
Tujuan : Diketahuinya pengaruh berkumur air rebusan daun salam terhadap *pH* saliva pada pengguna ortodonti cekat.
Metode : Penelitian ini merupakan eksperimen semu dengan rancangan *Pretest Posttest With Control Group.* Sampel Penelitian ini sebanyak 80 responden yang diambil dengan teknik *accidental*, 40 responden sebagai kelompok eksperimen dan 40 responden sebagai kelompok kontrol. Pembuatan air rebusan daun salam menggunakan 10 gram (± 10 lembar) yang sudah di keringkan selama 4 hari dalam suhu ruang, kemudian dibersihkan dan direbus dengan 500 ml aquades dengan suhu 100ºC sampai air rebusan berkurang menjadi 250 ml. Analisis data menggunakan uji *Wilcoxon* dan *Mann Wthiney.*
Hasil : Derajat keasaman (*pH)* saliva sebelum berkumur air rebusan daun salam pada kriteria asam sebanyak 35%, netral sebanyak 50% dan basa 15% dan sesudah berkumur kriteria asam sebanyak 2,5%, netral sebanyak 67,5%, dan basa sebanyak 30%. Dengan rata- rata sebelum berkumur 6,75 dan rata- rata setelah berkrumur 7,33. Berkumur air rebusan daun salam sebelum dan sesudah berbeda secara signifikan sebesar p=0,000. Diantara kelompok eskperimen dan kelompok kontrol miliki perbedaan secara signifikan sebesar p=0,000.
Kesimpulan : Air rebusan daun salam dapat meningkatkan *pH* saliva pada pengguna ortodonti cekat.
Kata Kunci : *pH* saliva, obat kumur, daun salam (*Syzygium polyanthum (Wight*)*Walp.*)