INTISARI

Pemakaian alat ortodonti cekat beresiko meningkatkan akumulasi plak gigi. Akumulasi plak gigi dapat dikontrol salah satunya dengan menggunakan obat kumur yang mengandung antibakteri. Daun salam (*Syzygium polyanthum Weight*) mengandung senyawa minyak atsiri, tanin dan flavonoid yang berfungsi menghambat pertumbuhan bakteri. Tujuan penelitian untuk mengetahui pengaruh berkumur air rebusan daun salam (*Syzygium polyanthum Weight*) konsentrasi 60% terhadap akumulasi plak gigi pada pemakai alat ortodonti cekat.

Penelitian eksperimental klinis dengan rancangan *pretest* dan *post test control group design* dilakukan terhadap 20 subjek. Subjek penelitian adalah mahasiswa Fakultas Kedokteran Gigi Universitas Gadjah Mada yang dipilih sesuai kriteria penelitian. Subjek diinstruksikan untuk berkumur dengan air rebusan daun salam (*Syzygium polyanthum Weight*) konsentrasi 60% dan berkumur menggunakan obat kumur klorheksidin 0,2% sebagai kontrol. Selang waktu yang diperlukan antara berkumur dengan air rebusan daun salam (*Syzygium polyanthum Weight*) konsentrasi 60% dan berkumur dengan klorheksidin 0,2% adalah 7 hari. Setiap obat kumur secara rutin digunakan selama 7 hari dengan ketentuan dan intensitas yang sama. Pengukuran plak dilakukan sebelum dan sesudah setiap perlakuan obat kumur menggunakan metode *Orthodontic Plaque Index* (OPI).

Hasil analisis uji *One-Way Anova* menunjukkan terdapat perbedaan yang bermakna pada indeks plak sebelum dan sesudah perlakuan antara kelompok berkumur air rebusan daun salam 60% dan kelompok berkumur klorheksidin ($p<0,05$). Kesimpulan penelitian adalah berkumur air rebusan daun salam 60% dapat menurunkan akumulasi plak gigi pada pemakai alat ortodonti cekat.

Kata kunci: alat ortodonti cekat, akumulasi plak, air rebusan daun salam 60%

ABSTRACT

Fixed orthodontic appliance patients have a high risk to increasing plaque accumulation. Using mouthwash with antibacterial agent can control dental plaque accumulation. Bay leaf (Syzygium polyanthum Weight) contains active compounds such as essential oil, tannin and flavonoid to inhibit bacteria growth. The aim of this study was to determine the effect of gargling with 60% of bay leaf (Syzygium polyanthum Weight) water decoction to the accumulation of dental plaque in fixed orthodontic appliance patients.

The design of research was clinical experimental with pretest and post test control group design conducted on 20 subjects. The subjects were students of Faculty of Dentistry Gadjah Mada University that were chosen by research criteria. The subjects were instructed to gargling with 60% of bay leaf (Syzygium polyanthum Weight) water decoction and gargling with chlorhexidine 0.2% as a control. Wash out period that needed between gargling with 60% of bay leaf (Syzygium polyanthum Weight) water decoction and gargling with chlorhexidine 0.2% was 7 days. Each mouthwash used routinely for 7 days with same provision and intensity. Plaque scoring was measured before and after each treatment using Orthodontic Plaque Index (OPI).

The result of One-Way Anova test showed that there was a significant difference in the plaque index before and after treatment between the group of gargling with 60% of bay leaf (Syzygium polyanthum Weight) water decoction and group of gargling with chlorhexidine ($p<0.05$). The conclusion of this study is gargling with 60% of bay leaf (Syzygium polyanthum Weight) water decoction can decrease the accumulation of dental plaque in fixed orthodontic appliance patients.

Keywords: fixed ortodontic appliance, plaque accumulation, 60% of bay leaf water decoction