

ABSTRAK

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Program studi : Kedokteran Gigi
Judul : Perbedaan Pengaruh Irigasi NaOCl 2,5% dan Propolis 8% Terhadap Kerapatan penutupan Apikal Siler Biokeramik
Pembimbing : drg. Ira Anggar Kusuma, M.Si dan drg. Isnaya Nosartika, M.DSc., Sp.Perio

Pendahuluan: Keberhasilan perawatan endodontik ditentukan oleh tercapainya triad endodontik preparasi biomekanis, disinfeksi, dan obturasi. Irigasi berperan penting dalam menghilangkan *smear layer* yang dapat menghambat obturasi. Natrium hipoklorit (NaOCl) merupakan *golden standard*, sedangkan propolis menjadi alternatif herbal karena sifat antibakteri, antivirus, antijamur, antiinflamasi, dan anestesi. **Tujuan:** Mengetahui perbedaan pengaruh irigasi NaOCl 2,5% dan propolis 8% terhadap kerapatan penutupan apikal siler biokeramik. **Metode:** Penelitian kuasi-eksperimen *post-test only group design* dengan 30 sampel gigi, dibagi dalam kelompok perlakuan dan kontrol. Analisis menggunakan *One Way Anova* dan uji *post hoc* Tukey. **Hasil:** *One Way Anova* menunjukkan perbedaan signifikan antar kelompok ($p = 0,024$). Uji Tukey menunjukkan perbedaan signifikan antara NaOCl dan kontrol ($p = 0,021$), namun tidak signifikan antara propolis dan kontrol ($p = 0,135$), serta antara NaOCl dan propolis ($p = 0,659$). **Kesimpulan:** Tidak terdapat perbedaan signifikan antara NaOCl 2,5% dan propolis 8% terhadap kerapatan penutupan apikal siler biokeramik.

Kata kunci: Perawatan saluran akar, irigasi, NaOCl, propolis, kerapatan penutupan apikal, *crown-down*, *single-cone*.

ABSTRACT

Name : Khresna Adji Nur Raga
Study Program : Dentistry
Title : The Difference in the Effect of 2.5% NaOCl and 8% Propolis
Irrigation on the Apical Leakage of Bioceramic Sealer
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Introduction: The success of endodontic treatment is determined by achieving the endodontic triad: biomechanical preparation, disinfection, and obturation. Irrigation plays a crucial role in removing the smear layer, which can hinder optimal obturation. Sodium hypochlorite (NaOCl) is the gold standard, while propolis is a herbal alternative due to its antibacterial, antiviral, antifungal, anti-inflammatory, and anesthetic properties. **Objective:** To examine the difference in the effect of 2.5% NaOCl and 8% propolis irrigation on the apical sealing ability of bioceramic sealer. **Methods:** This quasi-experimental study used a post-test only group design with 30 extracted teeth divided into treatment and control groups. Data were analyzed using one-way ANOVA and Tukey's post hoc test. **Results:** One-way ANOVA showed a significant difference among groups ($p = 0.024$). Tukey's test revealed a significant difference between NaOCl and control ($p = 0.021$), but not between propolis and control ($p = 0.135$), nor between NaOCl and propolis ($p = 0.659$). **Conclusion:** There was no significant difference between 2.5% NaOCl and 8% propolis in the apical sealing ability of bioceramic sealer.

Keywords: Root canal treatment, irrigation, NaOCl, propolis, apical sealing ability, crown-down, single-cone.