

ABSTRAK

PENGARUH *EDIBLE COATING* TERHADAP STABILITAS WARNA PLAT AKRILIK AKIBAT PERENDAMAN LARUTAN KLOORHEKSIDIN 0,2 %

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Latar Belakang: Salah satu sifat resin akrilik sebagai bahan dasar gigi tiruan adalah menyerap air yang berakibat pada stabilitas warna plat resin akrilik. Klorheksidin 0,2% sebagai pembersih gigi tiruan bertujuan untuk membersihkan gigi tiruan dari plak maupun noda serta menghambat pertumbuhan mikroorganisme maupun jamur namun memiliki efek pemutih terhadap stabilitas warna plat resin akrilik. *Edible coating* yang memiliki sifat dalam menghambat laju difusi cairan diharapkan dapat memperbaiki sifat resin akrilik dalam penyerapan air.

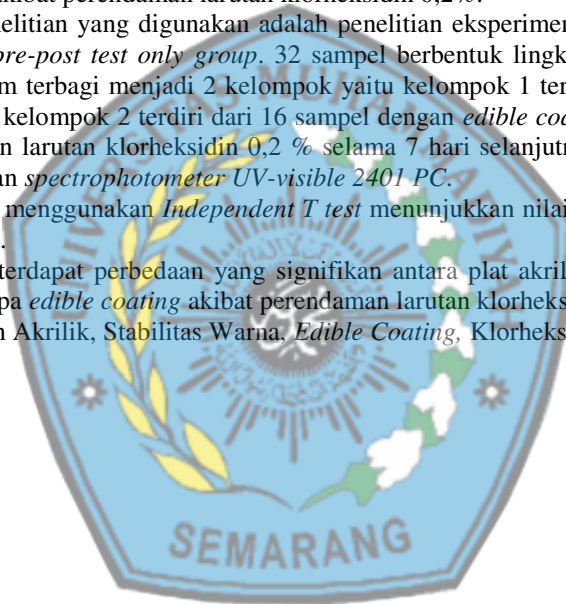
Tujuan: Penelitian ini bertujuan untuk mengetahui pengaruh *edible coating* terhadap stabilitas warna plat akrilik akibat perendaman larutan klorheksidin 0,2%.

Metode: Jenis penelitian yang digunakan adalah penelitian eksperimental murni dan rancangan penelitian adalah *pre-post test only group*. 32 sampel berbentuk lingkaran dengan diameter 25 mm dan tebal 2 mm terbagi menjadi 2 kelompok yaitu kelompok 1 terdiri dari 16 sampel tanpa *edible coating* dan kelompok 2 terdiri dari 16 sampel dengan *edible coating* kemudian dilakukan perendaman dengan larutan klorheksidin 0,2 % selama 7 hari selanjutnya pengukuran stabilitas warna menggunakan *spectrophotometer UV-visible 2401 PC*.

Hasil: Uji statistik menggunakan *Independent T test* menunjukkan nilai $p = 0,781$ ($p > 0,05$) yang artinya H_0 diterima.

Simpulan: Tidak terdapat perbedaan yang signifikan antara plat akrilik dengan *edible coating* dan plat akrilik tanpa *edible coating* akibat perendaman larutan klorheksidin 0,2 % selama 7 hari.

Kata kunci : Resin Akrilik, Stabilitas Warna, *Edible Coating*, Klorheksidin 0,2 %



ABSTRACT

THE EDIBLE COATING EFFECT ON THE COLOR STABILITY OF THE ACRYLIC PLATE IN SUBMERGENCE OF CHLORHEXIDINE OF 0,2% SOLUTION

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Background: As basic materials of denture, one of the properties of acrylic resin is to absorb water which resulted in the color stability of the acrylic resin plate. Chlorhexidine of 0,2 % as denture's cleanser aims to clean the denture from plaque or stain and inhibits the growth of microorganisms and fungi however it also has a whitening effect on the color stability of the acrylic resin plate. Due to having properties in inhibiting the rate of fluid diffusion, edible coating are expected to improve the properties of acrylic resins in water absorption.

Objective: This study aims to find out the edible coating effect on the color stability of the acrylic resin plate in submergence of chlorhexidine of 0,2 % solution.

Method: The writer used true experimental research and the research design is pre-post test only group. 32 circle samples with 25 millimeter-diameter and a two millimeter-thick layer were divided into 2 groups. The first group that consists of 16 samples are not coated by edible coating and the second group that consists of 16 samples are coated by edible coating then both soaked in chlorhexidine of 0,2 % solution for 7 days and measured of the color stability using spectrophotometer UV-visible 2401 PC.

Result: Statistical test using Independent T test showed p value = 0,781 ($p > 0,05$) which means H_0 accepted.

Conclusion: There was no significant difference between acrylic plate with edible coating and acrylic plate without edible coating due to immersion of 0.2% chlorhexidine solution for 7 days.

Keywords: Acrylic Resin, Color Stability, *Edible Coating*, Chlorhexidine of 0,2 %

