

ABSTRAK

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Program Studi : Kedokteran Gigi
Judul : Pengaruh Penggunaan Obat Amlodipin terhadap Risiko Karies Berdasarkan Laju Aliran, Viskositas, dan pH Saliva
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Pendahuluan: Hipertensi merupakan kondisi persisten tekanan darah sistemik nonfisiologis, dimana tekanan darah meningkat melebihi batas normal. Pasien hipertensi memerlukan penanganan secara farmakologi, salah satunya adalah dengan konsumsi obat Amlodipin. Penggunaan jangka panjang Amlodipin dapat menimbulkan efek samping seperti hiposalivasi dan perubahan keseimbangan cairan elektrolit yang dapat menyebabkan gangguan fungsi saliva sehingga terjadi peningkatan risiko karies. **Tujuan:** Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan obat Amlodipin terhadap risiko karies berdasarkan laju aliran, viskositas, dan pH saliva. **Metode:** Penelitian ini merupakan penelitian observasi analitik dengan rancangan *cross sectional* untuk mengetahui pengaruh penggunaan obat Amlodipin terhadap risiko karies berdasarkan laju aliran, viskositas, dan pH saliva. Pengambilan sampel menggunakan metode *purposive sampling* dengan jumlah sampel sebanyak 32 subjek untuk 2 kelompok. Penelitian dilakukan dengan mengambil sampel saliva pasien hipertensi yang mengonsumsi obat Amlodipin, kemudian diukur laju aliran, viskositas, dan pH salivanya. Uji statistik dilakukan menggunakan uji *Saphiro-Wilk* untuk mengetahui normalitas dan uji *Levene* untuk mengetahui homogenitas. Uji *Kruskal-Wallis* dan *Post hoc Mann-Whitney* dilakukan untuk mengetahui signifikansi perbedaan antara kelompok perlakuan dan kelompok kontrol. **Hasil:** Uji *Kruskal-Wallis* dan Uji *Post hoc Mann-Whitney* menunjukkan perbedaan signifikan antara kelompok perlakuan dan kelompok kontrol ($p < 0.05$). **Kesimpulan:** Terdapat pengaruh penggunaan obat Amlodipin terhadap risiko karies berdasarkan laju aliran, viskositas, dan pH saliva.

Kata kunci: Obat Amlodipin, laju aliran saliva, viskositas saliva, pH saliva, risiko karies.

ABSTRACT

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Study Program : Dentistry Study Program
Title : The Effect of Amlodipine Medication to Caries Risk Based
on Salivary Flow Rate, Viscosity, and pH.
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Introduction: Hypertension is a persistent non-physiologic systemic blood pressure, where the blood pressure rises beyond normal limits. Hypertensive patients need pharmacological treatments, one of them is Amlodipine medication. The long-term use of Amlodipine can cause side effects such as hyposalivation and changes in electrolyte fluid balance which can cause disruption of saliva function resulting in increase of the caries risk. **Objective:** The objective of this study is to assess the effect of Amlodipine medication to caries risk based on salivary flow rate, viscosity, and pH. **Method:** This research is an analitic observation study with cross sectional design to assess the effect of Amlodipine medication to caries risk based on salivary flow rate, viscosity, and pH. Purposive sampling method was used to take the samples with a total sample of 32 people for 2 groups. The study was carried out by took the saliva sample from hypertensive patient with Amlodipine medication, then the salivary flow rate, viscosity, and pH are meassured. Statistical tests done with Saphiro-Wilk test to assess the normality and Levene's Test to assess the homogeneity. Kruskal-Wallis test and Post hoc Mann-Whitney test were performed to assess the significance of differences among treatment group and control group. **Results:** Kruskal Wallis and Post hoc Mann Whitney tests indicated a significant difference among treatment group and control group ($p < 0.05$). **Conclusion:** The Amlodipine medication has an impact on the caries risk based on salivary flow rate, viscosity, and pH. **Key words:** Amlodipine medication, salivary flow rate, salivary viscosity, salivary pH, caries risk.