## PERIODONTAL INFLAMED SURFACE AREA OF PATIENT WITH HYPERTENSION IN PUSKESMAS PUCANG SEWU IN 2019

## **ABSTRACT**

**Background:** Hypertension is a condition of an increase blood pressure (120/80 mmHg) in arteries. According to Riskesdas 2013, the prevalence of hypertension in Indonesia reached 34,1%. Hypertension is often associated with the severity of periodontal disease. Hypertension causes increased bleeding on probing, increased pro inflamatory cytokines, collagen destruction, alveolar bone resorption. During this time, there are many classification of periodontitis as a risk factor for systemic disease. However, there is no standard regarding the classification of periodontitis as a risk factor for several systemic diseases quantitatively. **Objective:** to determine the difference Periodontal Inflamed Surface Area in patient with hypertension and non-hypertension at Local Public Health Center in Surabaya Subdistrict in 2019. Method: Observational analytic research on 20 patients in Puskesmas Pucang Sewu where grouped into 2 groups (hypertension and non-hypertensive). ALSA (Attachment Loss Surface Area), RSA (Recession Surface Area), BOP was conducted by calculating attachment loss, recession, bleeding on probing in six regions of each sample tooth. Then wait and evaluate to see the bleeding after 30 seconds. The results of the study carried out the calculation of PISA on excel worksheet and performed a statistical test. **Results:** The results on this study was 32.0800 mm<sup>2</sup> on hypertension groups and 2.2530 mm<sup>2</sup> on non-hypertension groups. In Mann Withney test p=0.007(p<0.05) was obtained were there were significant differencies between the two groups. Conclusion: Periodontal Inflamed Surface Area in patients with hypertension is higher than the Periodontal Inflamed Surface Area in patient with non hypertension.

**Keywords**: Periodontal Inflamed Surface Area, Hypertension

## PERIODONTAL INFLAMED SURFACE AREA PADA PENDERITA HIPERTENSI YANG DATANG DI PUSKESMAS PUCANG SEWU TAHUN 2019

## **ABSTRAK**

Latar Belakang: Hipertensi merupakan kondisi terjadinya peningkatan tekanan darah (120/80 mmHg) pada pembuluh darah arteri. Menurut Riskesdas 2018 prevalensi penyakit hipertensi di Indonesia mencapai 34,1%. Penyakit hipertensi sering dikaitkan dengan keparahan penyakit periodontal. Hipertensi menyebabkan peningkatan bleeding on probing, peningkatan sitokin proinflamasi, destruksi kolagen, resorpsi tulang alveolar. Selama ini banyak klasifikasi periodontitis sebagai faktor risiko beberapa penyakit sistemik. Namun belum ada suatu standar mengenai klasfikasi periodontitis sebagai faktor risiko beberapa penyakit sistemik secara kuantitatif. Tujuan: Untuk mengetahui Periodontal Inflamed Surface Area pada penderita hupetensi yang datang di Puskesmas Pucang Sewu tahun 2019. Metode: Penelitian analititk observasional pada 20 pasien yang datang di puskesamas Pucang Sewu dikelompookkan menjadi 2 kelompok yaitu pasien hipertensi dan non hipertensi. Kemudian dilakukan penghitungan ALSA (Attachment Loss Surface Area) dan RSA (Recession Surface Area) dengan menghitung attachment loss dan resesi pada enam daerah tiap gigi sampel. Kemudian dilakukan pengukuran *Bleeding on Probing* (BOP) pada enam daerah tiap gigi sampel. Kemudian ditunggu dan dievaluasi untuk melihat terjadinya perdarahan 30 detik. Hasil penelitian dilakukan penghitungan PISA pada lembar kerja excel dan dilakukam uji statitistik. Hasil: Hasil penelitian didapatkan ratarata 32.0800 mm² pada kelompok hipertensi dan 2.2530 mm² pada kelompok nonhipertensi. Pada uji Mann Withney didapatkan p=0,007 (p<0,05) dimana terdapat perbedaan signifikanan antar dua kelompok. Kesimpulan: Periodontal Inflamed Surface Area pada penderita hipertensi lebih tinggi daripada Periodontal Inflamed Surface Area pada penderita non hipertensi.

Kata kunci: Hipertensi, Periodontal Inflamed Surface Area