



**HUBUNGAN KADAR BIOPIRIN URIN DENGAN DERAJAT
KEPARAHAN PSORIASIS VULGARIS
DI RSUP DR.M.DJAMIL PADANG**

TESIS

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Abstrak

Latar Belakang: Psoriasis merupakan penyakit peradangan pada kulit yang kronik residif dengan etiologi yang kompleks dan terdapatnya interaksi antara faktor genetik dan lingkungan. Pada psoriasis, terdapat peningkatan stres oksidatif, baik sebagai akibat dari paparan sinar ultraviolet, maupun akibat peningkatan inflamasi yang menghasilkan sitokin proinflamasi leukosit polimorfonuklear. Bilirubin sebagai antioksidan intrinsik melawan stres oksidatif, melalui proses oksidasi dengan menguraikan rantai oksigen pada reaktif oksigen spesies (ROS), dan menghasilkan metabolit yang diekskresikan berupa biopirin urin. Kadar biopirin urin yang dihasilkan berhubungan dengan derajat keparahan penyakit.

Tujuan: Untuk mengetahui hubungan kadar biopirin urin dengan derajat keparahan psoriasis vulgaris pada pasien psoriasis vulgaris RSUP DR.M.Djamil Padang.

Bahan dan Metode: Satu penelitian *cross-sectional* dilakukan pada pasien yang telah didiagnosis psoriasis vulgaris di divisi alergi imunologi poliklinik Kulit dan Kelamin RSUP DR. M. Djamil Padang. Jumlah sampel 33 pasien dan tidak ada pasien sampel yang *drop out*. Kriteria eksklusi: menggunakan kortikosteroid oral ataupun topikal, immunosupresan, menderita penyakit kulit lain seperti dermatitis atopik, dan menderita diabetes mellitus dan sedang hamil/menyusui. The Kadar biopirin urin dianalisis menggunakan ELISA *reader*. Penelitian dilakukan dari Juni 2016-Maret 2017.

Hasil: Terdapat hubungan antara kadar biopirin urin dengan derajat keparahan psoriasis vulgaris yang dinilai dengan skor PASI ($r = 0.61, p < 0.05$).

Kesimpulan: Terdapat hubungan antara kadar biopirin urin dengan derajat keparahan psoriasis vulgaris dinilai dengan skor PASI. Karena terdapatnya peningkatan kadar biopirin urin seiring peningkatan skor PASI, penelitian lebih lanjut diperlukan menggunakan *cross sectional* yang bersifat komparatif dibutuhkan untuk konfirmasi penelitian ini.

Keywords: *biopirin urin, psoriasis vulgaris, skor PASI*

THE CORRELATION BETWEEN URINARY BIOPYRRINS AND SEVERITY INDEX SCORE OF PSORIASIS VULGARIS PATIENT'S IN DR. M. DJAMIL HOSPITAL PADANG

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Abstract

Background: Psoriasis is an inflammatory skin disease that chronic and often recurrent with a complex etiology and interaction between genetic and environmental factors. In psoriasis, there is increased oxidative stress, whether as a result of exposure to ultraviolet light, as well as an increase in expenses due to inflammation of proinflammatory cytokines such as polymorphonuclear leukocytes. Bilirubin as an intrinsic antioxidant will be against oxidative stress, through the oxidation process by breaking the chain of oxygen in reactive oxygen species (ROS), and produces metabolites are excreted through urine biopirin. Urinary biopirin levels produced related to the severity of the disease.

Objective: To asses the correlation between urinary biopyrrins and severity index score of psoriasis vulgaris patient.

Subject and method: A *cross-sectional* study conducted in patients who had been diagnosed as psoriasis vulgaris in outpatient Dermato-Venereology Clinic of DR. M. Djamil Hospital Padang. The total sample is 33 patients and there was no drop out. Exclusion criteria: using oral steroid, imunosuppresan, nonsteroid anti inflammation, suffer other dermatoses such as acne vulgaris, atopic dermatitis, diabetes mellitus and pregnancy/lactation. The concentration of urinary biopyrrins was analyzed using ELISA reader. The study was conducted from June 2016 to March 2017.

Result: A positive correlation was found between urinary biopyrrins and severity index score of psoriasis vulgaris ($r = 0.61$, $p < 0.05$).

Conclusion: There is positive correlation between the urinary biopyrrins concentration and severity index score of psoriasis vulgaris. Because there is an increasing trend between urinary biopyrrins concentration and PASI score, a further research using *cross sectional comparative* is needed to confirm this study.

Keywords: *urinary biopyrrins, psoriasis vulgaris, PASI score*