



INTISARI

Latar Belakang: *Pruritic papular eruption* (PPE) merupakan kelainan kulit non-infeksi yang bersifat kronis pada penderita HIV/AIDS dengan etiopatogenesis tidak diketahui pasti. Peran Th-2 dominan pada tahap lanjut perjalanan infeksi HIV/AIDS dianggap ikut berperan dalam etiopatogenesis PPE dan di sisi lain telah dikaitkan pula dengan terjadinya gangguan fungsi sawar kulit penderita HIV/AIDS non-atopi.

Tujuan: Mengetahui apakah penderita HIV/AIDS dengan PPE mengalami gangguan fungsi sawar kulit lebih berat dibandingkan penderita non-PPE.

Metode: Penelitian menggunakan rancangan kasus kontrol. Fungsi sawar kulit diukur menggunakan parameter TEWL dan hidrasi kulit dengan alat Tewameter® dan Corneometer®. Analisis bivariat perbedaan rerata nilai TEWL dan hidrasi kulit menggunakan *independent-t test*. Analisis perbedaan karakteristik subyek, serta hubungan nilai TEWL dan nilai hidrasi kulit dengan kejadian PPE menggunakan *Chi-Square test* dengan kemaknaan $p < 0,05$. Hasil analisis bivariat dengan $p < 0,25$ dianalisis lanjut menggunakan uji regresi logistik.

Hasil: Jumlah total subyek penelitian 58 subyek, terdiri 29 subyek PPE sebagai kelompok kasus dan 29 subyek non-PPE sebagai kelompok kontrol. Terdapat perbedaan bermakna rerata nilai TEWL ($p = 0,011$) dan hidrasi kulit ($p = 0,000$) kelompok kasus ($8,6 \pm 2,2 \text{ g/h/m}^2$; $25,3 \pm 6,2 \text{ a.u.}$) dan kelompok kontrol ($6,9 \pm 2,6 \text{ g/h/m}^2$; $32,3 \pm 6,8 \text{ a.u.}$), serta terdapat hubungan bermakna nilai TEWL $\geq 7,8 \text{ g/h/m}^2$ ($OR = 4,938$; 95% CI 1,623-15,023; $p = 0,004$) dan nilai hidrasi kulit $< 28,8 \text{ a.u.}$ ($OR = 5,143$; 95% CI 1,655-15,985; $p = 0,004$) dengan kejadian PPE. Analisis multivariat bersama variabel bermakna lain menunjukkan hanya variabel jumlah limfosit CD4 $< 200 \text{ sel/mm}^3$ ($OR = 16,577$; 95% CI 3,637-75,558; $p = 0,000$) dan nilai TEWL $\geq 7,8 \text{ g/h/m}^2$ ($OR = 4,986$; 95% CI 1,286-19,325; $p = 0,020$) yang menunjukkan hubungan bermakna dengan kejadian PPE.

Kesimpulan: Gangguan fungsi sawar kulit penderita HIV/AIDS dengan PPE lebih berat dibandingkan penderita non-PPE serta terdapat hubungan bermakna nilai TEWL $\geq 7,8 \text{ g/h/m}^2$ dan nilai hidrasi kulit $< 28,8 \text{ a.u.}$ dengan kejadian PPE.

Kata Kunci: HIV/AIDS, PPE, sawar kulit, TEWL, hidrasi kulit



ABSTRACT

Background: Pruritic papular eruption (PPE) is a chronic non-infectious skin disease in HIV/AIDS patients with unknown etiopathogenesis. The role of T helper 2 (Th-2) which was dominant in the advanced stages of HIV/AIDS infection is considered to play a role in the etiopathogenesis of PPE and on the other hand, the dominant role of Th-2 cytokines has been associated with the occurrence of impaired skin barrier function in non-atopic HIV/AIDS patients.

Objective: To know, whether HIV/AIDS patients with PPE have more severe skin barrier dysfunction compared to non-PPE patients.

Method: This study using case-control design. The skin barrier function was measured are TEWL and skin hydration parameters using Tewameter® and Corneometer® tools. Bivariate analysis of mean differences in TEWL and skin hydration using independent-t test. Analysis of differences in subject characteristics, as well as the relationship between TEWL and skin hydration with PPE using the Chi-Square test with significance $p < 0.05$. Bivariate analysis results with $p < 0.25$ were analyzed using logistic regression tests.

Results: This study included 58 subjects, consisted of 29 PPE subjects as a case group and 29 non PPE subjects as a control group. There were significant differences in mean TEWL ($p = 0.011$) and skin hydration ($p = 0.000$) between case groups ($8.6 \pm 2.2 \text{ g/h/m}^2$; $25.3 \pm 6.2 \text{ a.u.}$) and control groups ($6.9 \pm 2.6 \text{ g/h/m}^2$; $32.3 \pm 6.8 \text{ a.u.}$), and there was a significant relationship between the $\text{TEWL} \geq 7.8 \text{ g/h/m}^2$ (OR = 4.938; 95% CI 1.623-15.023; $p = 0.004$) and the skin hydration $< 28.8 \text{ a.u.}$ (OR = 5.143; 95% CI 1.655-15.985; $p = 0.004$) with PPE. Multivariate analysis with other significant variables showed that only variable CD4 lymphocyte count $< 200 \text{ cells/mm}^3$ (OR = 16.577; 95% CI 3.637-75.558; $p = 0.000$) and $\text{TEWL} \geq 7.8 \text{ g/h/m}^2$ (OR = 4.986; 95% CI 1.286-19.325; $p = 0.020$) which has a significant relationship with PPE.

Conclusion: Skin barrier dysfunction in HIV/AIDS patients with PPE more severe than non-PPE patients and also there was a significant relationship between $\text{TEWL} \geq 7.8 \text{ g/h/m}^2$ and skin hydration $< 28.8 \text{ a.u.}$ with PPE.

Key words: HIV/AIDS, PPE, skin barrier, TEWL, skin hydration