

ABSTRAK

Pendahuluan: Pengobatan melasma menggunakan obat-obatan atau Vitamin E berbiaya mahal. Teh hijau menjadi pilihan berikutnya oleh karena tidak toksik, antioksidan kuat dan murah. **Tujuan :** membandingkan efektifitas antara teh hijau dengan tokoferol dalam menurunkan jumlah melanin dan kadar tirosinase pada tikus wistar yang dipapar SUVB. **Metode :** Penelitian eksperimental menggunakan 30 ekor tikus wistar jantan yang dibagi 3 kelompok. Kelompok control (P.0) diberi oles krim dasar, P.1 diberi oles krim teh hijau dan P.2 diberi oles krim tokoferol. Ketiga kelompok dioles krim 20 menit sebelum paparan SUVB dan 4 jam sesudah paparan. Paparan UVB diberikan selama 4 minggu, dengan dosis 50 mJ/cm^2 pada minggu I, 70 mJ/cm^2 pada minggu II dan 80 mJ/cm^2 pada minggu III dan IV. Pemberian paparan 3 x seminggu setiap hari Senin, Rabu dan Jum"at, sedangkan pengolesan krim dilakukan setiap hari pada jam yang sama. Analisa data dengan uji *Anova* dan Post Hoc LSD . **Hasil:** Hasil analisis anova menunjukkan bahwa ada perbedaan bermakna diantara kelompok melanin maupun tirosinase dengan $p < 0,05$. Rerata melanin (P0: $17,81\% \pm 1,93$, P1: $5,97\% \pm 1,59$ dan P2: $9,82\% \pm 1,72$) dan rerata tirosinase (P0: $2,23 \text{ ng/ml} \pm 0,49$, P1: $1,020 \text{ ng/ml} \pm 0,78$ dan P2: $2,05 \text{ ng/ml} \pm 0,71$). Hasil uji Post Hoc LSD : P.I lebih bermakna menurunkan jumlah melanin dan kadar tirosinase dibanding P0 maupun P.2 sedangkan P0 dan P2 tidak ada perbedaan bermakna. **Kesimpulan :** Pemberian teh hijau lebih banyak menurunkan jumlah melanin dan kadar tirosinase dibanding vitamin E (tokoferol).

Kata kunci : Teh hijau, tokoferol, jumlah melanin, kadar tirosinase

ABSTRAC

Introduction: Treatment of melasma using drugs or Vitamin E is expensive. Green tea is the next choice because it is not toxic, a powerful and inexpensive antioxidant. **Objective:** To compare the effectiveness of green tea with tocopherol in reducing the amount of melanin and tyrosinase levels in wistar rats exposed to SUVB. **Method:** The experimental study used 30 male wistar rats divided into 3 groups. The control group (P.0) was given a basic cream topical, P.1 was given a topical green tea cream and P.2 was given a tocopherol cream topical. The three groups were smeared with cream 20 minutes before SUVB exposure and 4 hours after exposure. UVB exposure was given for 4 weeks, with dose of 50 mJ / cm² in week I, 70 mJ / cm² in week II and 80 mJ / cm² in weeks III and IV. Giving exposure to 3 times a week every Monday, Wednesday and Friday, while applying the cream is done every day at the same time. Data analysis with anova and Post Hoc LSD test. **Results:** The results of the ANOVA analysis showed that there were significant differences between the melanin and tyrosinase groups with $p < 0.05$. Melanin mean (P0: 17.81% \pm 1.93, P1: 5, 97% \pm 1.59 and P2: 9.82% \pm 1.72) and mean tyrosinase (P0: 2.23 ng / ml \pm 0.49, P1: 1.020 ng / ml \pm 0.78 and P2: 2, 05 ng / ml \pm 0.71). Post Hoc LSD: P.I test results were more significant in reducing the number of melanin and tyrosinase levels compared to P0 and P.2 while P0 and P2 were not significantly different. **Conclusion:** Giving green tea reduces the amount of melanin and tyrosinase levels more than vitamin E (tocopherol).

Keywords: Green tea, tocopherol, amount of melanin, tyrosinase levels