

INTISARI

PENGARUH PEMBERIAN SEDUHAN GETAH BUAH OKRA (*Abelmoschus esculentus*) TERHADAP PERUBAHAN KADAR BLOOD UREA NITROGEN DAN KREATININ TIKUS WISTAR MODEL GOUT

Muhammad Luthfi Haidar
13/347083/KH/7684

Gout merupakan suatu penyakit yang disebabkan oleh deposisi kristal asam urat pada persendian dan organ visceral. Okra merupakan tanaman yang banyak mengandung *quercetin*, jenis flavonoid yang diduga memiliki efek anti- asam urat sehingga dapat digunakan untuk menurunkan kadar asam urat. Tujuan penelitian ini adalah untuk membandingkan efek terapi antara seduhan getah buah okra dengan allopurinol sebagai obat standar pada kasus *gout* yang berhubungan dengan kerusakan ginjal dengan indikator kadar *blood urea nitrogen* (BUN) dan kreatinin dalam serum menggunakan hewan model *gout*. Sebanyak 12 ekor tikus Wistar jantan berumur tiga bulan dibagi menjadi empat kelompok, yaitu kelompok kontrol sehat yang diberi larutan CMC-Na (*Sodium Carboxymethyl Cellulose*) 0,3% sebanyak 2 ml, kelompok kontrol *gout*, kelompok perlakuan yang diberi seduhan getah buah okra 100% sebanyak 2 ml perhari selama satu minggu, dan kelompok kontrol obat standar yang diberi allopurinol 0,18 g/kg BB perhari selama satu minggu. Semua kelompok kecuali kelompok kontrol sehat diinduksi *potassium oxonate* dalam CMC-Na 0,3% secara intraperitoneal. Pengambilan sampel darah pra-terapi dilakukan dua jam setelah induksi dan pengambilan sampel darah pasca-terapi dilakukan tujuh hari setelah kelompok 3 dan kelompok 4 diberikan terapi. Pengukuran kadar BUN dan kreatinin dalam serum dilakukan dengan metode Dyasis. Hasil uji statistika menunjukkan adanya perbedaan yang signifikan antara pemberian larutan getah buah okra ($p < 0,05$) dan hasil analisis secara deskriptif menunjukkan pemberian seduhan getah buah okra memiliki pengaruh terhadap perubahan kadar BUN dan kreatinin. Berdasarkan hasil penelitian ini dapat disimpulkan bahwa pemberian seduhan getah buah okra dapat menurunkan kadar BUN dan kreatinin pada hewan model *gout*.

Kata kunci : asam urat, BUN, kreatinin, okra, *quercetin*.

ABSTRACT

THE EFFECT OF OKRA FRUIT (*Abelmoschus esculentus*) ON BLOOD UREA NITROGEN AND CREATININE SERUM IN GOUT RAT MODEL

Muhammad Luthfi Haidar
13/347083/KH/7684

Gout is an inflammatory reaction due to high concentration of uric acid that further cause uric acid deposition in articular and visceral organs. Okra is a plant that contains quercetin, a flavonoid possessing a therapeutic effect to reduce the blood uric acid level that makes it considered as a potential alternative medication as an anti-gout. The study aimed to compare the therapeutic effect between okra sap fruit and allopurinol, a standard medication for gout, based on BUN and creatinine level serum change using gout-induced rats as gout-model animals. A group of 12 male rats were divided into four groups. The first was the control group which was given CMC-Na (Sodium Carboxymethyl Cellulose) 0,3%. The second was gout control group which was injected with potassium oxonate intraperitoneally. The third and the fourth group also injected with potassium oxonate intraperitoneally and then given okra sap fruit 100% 2 ml and allopurinol 0,18 g/kg P.O. as medication respectively once a day for a week. The first blood samplings were done two hours after induced and the second one was done seven days after medication. Measurement for BUN and creatinine blood serum level were done using Dyasis method. The statistic test showed a significant difference between the third and the fourth group ($p < 0,05$) both based on the BUN and creatinine serum level. The descriptive analysis showed that the group given allopurinol had amount of BUN serum level lower than the group that given okra sap fruit after seven days. The descriptive analysis for the creatinine measurement showed that there was slightly difference in level of decreased creatinine level serum between the third and the fourth group. It can be concluded that in this research there was significant effect between okra sap fruit and allopurinol as the medication for gout.

Keywords: uric acid, BUN, creatinine, okra, quercetin.