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The Effect of Pomegranate Extract on Blood Urea Nitrogen (BUN), and Creatinin Serum in White Rat (Rattus norvegicus) Acute Renal Failure Processes

Abstrak :

The purpose of the research was to determine pomegranate extract effect in white rats (Rattus norwegicus) as an animal model of acute renal failure to decrease blood urea nitrogen (BUN) and creatinine serum. Twenty four male rats at two to three months old with 150-200 gram of body weight, that were grouped into four different treatments. P0 group was a control group with 0.3% CMC Na 2 ml given orally, P1 group was given by 0.3% CMC Na 2 ml orally and gentamicin 80 mg/kg intraperitoneal, P2 and P3 groups were given by ellagic acid (EA) 60 mg/kg intraperitoneal and pomegranate extract (Punica granatum linn) 150 mg/kg intraperitoneal respectively in 0.3% CMC Na 2 ml in orally and gentamicin 80 mg/kg intraperitoneal. After seven days treatment, blood sample taken with intracardiac method, and then blood processing BUN and creatinine test using Berthelot and Jaffe method to examine the value of BUN and cratinine levels. The result showed that there were significant differences between each treatment group. P0 group had significantly different results with the P1 and P2 groups (p <0.05) but not significantly different from P3 (p> 0.05). The conclusion of the researched BUN and serum creatinine levels indicated there were influence of pomegranate fruit extract to decrease serum levels of BUN and creatinine in process white rat acute renal failure.

Keyword :

Blood Urea Nitrogen, Creatinin, Ellagic Acid, Pomegranate Extract

Daftar Pustaka :

Bijanti R., M.G.A Yuliani., R.S Wahjuni., R.B Utomo Buku Ajar Patologi Klinik Veteriner Airlangga University Press 2010 Surabaya

Tessy Agus,Ardaya,Suwanto Buku Ajar Ilmu Penyakit Dalam;Infeksi Saluran Kemih FKUI 2001 Jakarta

Seeram NP,RN Schulman, D Heber Pomegranate Ancient Roots to Modern Medicine 1st Ed. Taylor and Francis Group, pp 2-99. 2006 New York

Sumaryono Analisis Urea dan Kreatinin Tikus Putih Pasca Pemberian Ekstrak Mahkota Dewa dan Herba Pegagan Pusat Farmasi dan Fakultas Farmasi Universitas Pancasila 2007 Jakarta

Zhang Y.,D Wang ., R Lee.,S.M Henning., and D Heber. Absence of pomegranate Ellagitannins in the majority of commercial pomegranate extract : implication for standardization and quality control J. Agric. Food Chem 57: 7395-7400 2009 London