

Lactogenic Activity of an Aqueous Extracts of Herbal Galactagogues

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Abstract

Most of Indonesian rural community use decoction extract of *Centella asiatica* (L.) Urban (C), *Justicia gendarussa* (J) and *Imperata cylindrica* (I) to treat hypertension. This study purposed to get its rational form in lowering blood pressure and its effect on heart tissue prevention through oxidative stress inhibition. This experimental laboratory study divided 30 males (180-200 g) Wistar Kyoto rats and Spontaneous Hypertensive rats (SHR) into two groups, control (CTL) (aquadest) and treatment group (oral administered decoction of C (9 mg), J (9 mg), and I (5.4 mg)), once daily for 5 weeks. Weekly observation on systolic blood pressure (SBP), heart rates, metabolic profiles (body weight, food consumption, drinking water, urine volume and stool weight). Echocardiography examinations were taken before sacrifice. Oxidative stress assays were measured on serum and heart tissue lipid peroxidation and reactive oxygen species (ROS). Treatment group showed lowering weekly systolic blood pressure on spontaneous hypertensive rat (SHR) respectively ($p < 0.01$) and slower heart rates compared to SHR CTL group ($p < 0.05$). There were no changes in metabolic profiles among all groups. Treatment group had increased in left ventricular heart fractional shortening (FS) and ejection fraction (EF) on SHR group ($p < 0.01$). Treatment group demonstrated diminished serum ($p < 0.001$) and heart tissue ($p < 0.01$) malondialdehyde, anion superoxide and hydrogen peroxide generation on SHR group ($p < 0.01$). Given decoction extract of CJI lowered SBP and protected heart by oxidative stress diminution on SHR. These findings suggest that CJI has potential therapeutic in the treatment of hypertension. **Keyword:** *Centella asiatica* (L.) Urban, *Justicia gendarussa*, *Imperata cylindrica*, decoction, oxidative stress, hypertension.

Biography:

Erna Sulistyowati has been pursuing her Ph.D program at Kaohsiung Medical University, Taiwan since 2014. She is either a medical doctor and lecturer at Faculty of Medicine, University of Islam Malang Indonesia. She has been doing research about herbal medicine related to cardiovascular system. She also has already got doctor's clinical licence in Indonesian traditional practice (Dokter Praktek Jamu). She has published more than 12 papers in Indonesian journals. Recently she is doing herbs-medicine research as a part of scientific program of jamu in Indonesia traditional medicine.