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ABSTRACT 214

ANTIHYPERTENSIVE EFFECT OF ORTHOSIPHON STAMINEUS EXTRACTS IN SPONTANEOUS HYPERTENSIVE RATS: A PRELIMINARY STUDY

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INTRODUCTION

The effect of active phenolic and flavonoid components in OS includes a continuous decrease in systolic blood pressure by virtue of a vasodilating action, a decrease in cardiac output and the diuretic action in eliminating sodium.

OBJECTIVE

The main objective of the study was to investigate the effectiveness of standardized methanol extracts of OS as anti hypertensive agent at different dosages.

METHODS

The antihypertensive effects of OS extracts were examined by treating different groups of SHR with a single oral administration (10 ml/ kg) for 14 days. The rats were randomly divided into five different groups; Group 1 received Irbesartan (IR) drug (20 mg/kg), Group 2 received distilled water; and treatment groups (Group 3, 4 and 5) were treated with OS extracts at three different doses of 250 mg/kg, 500 mg/kg and 1000 mg/kg respectively. Systolic blood pressure (SBP) was measured by using tail cuff method on the day 0 (before initiating treatment) and at the end of observation period (day 14).

RESULTS

The SBP was reduced significantly at the end of treatment (day 14) compared to the pre treatment day (day 0) at these dosage: 250 mg/kg (p-value: 0.012); 500 mg/kg (p-value: 0.006); 1000 mg/kg (p-value: 0.044).

CONCLUSION

Standardized methanol extracts of OS was an effective anti hypertensive agent in reducing blood pressure of spontaneous hypertensive rats even at a minimal dose of 250ml/kg.

Key words: Orthosipon stamineus, antihypertensive effects