HYPOTENSIVE EFFECT OF *Campomanesia xanthocarpa* AND ITS POSSIBLE ACTION MECHANISM

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**INTRODUCTION:** The *Campomanesia xanthocarpa* is known in Brazil as Guabiroba and popularly used for various diseases, including inflammatory, renal, digestive, among others. The objective was to investigate the effects of aqueous extract of *C. xanthocarpa* on blood pressure of normotensive rats by checking the possible mechanism of action. **MATERIAL AND METHODS:** Male Wistar rats were used, 3 months (n=6), anesthetized with urethane (400 mg/kg), catheterized the carotid artery (measured systolic (SBP) and diastolic blood pressure (DBP)), and the vein jugular (administration of aqueous extract, dose 25-200 mg/Kg and drugs such as L-NAME, 30 mg/kg, Losartan, 20 mg/kg, hexamethonium, 10 mg/kg and angiotensin II, 3 μg/kg). Data were expressed as mean±SEM and analyzed by Student t test, p<0.05 was considered significant. **RESULTS:** The aqueous extract of *C. xanthocarpa* decreased the animal’s blood pressure (BP) in a dose-dependent manner from 50 mg/kg (16.7 mmHg and 15 mmHg to 61.4 mmHg and 49.7 mmHg, changes in SBP and DBP respectively). L-NAME and angiotensin II elevated BP in 73.2 to 59 mmHg and 58.2 to 61 mmHg, respectively, when administered the extract BP declined to normal levels (108,2x59 mmHg and 122,8x104 mmHg). The losartan and the hexamethonium decreased BP in 30.2 to 34.8 mmHg and 17 to 23.7 mmHg, but when given the extract BP did not change, what may suggest that the mechanism involved in the hypotensive effect of the extract may be through AT1 receptor and ganglionic blockade. **CONCLUSION:** Acute administration of aqueous extract of *C. xanthocarpa* has dose-dependent hypotensive effect in normotensive rats, suggesting that the action mechanism may be mediated through the renin-angiotensin system by AT1 receptor blockade and sympathetic autonomic response.

Palavras-chave: *Campomanesia xanthocarpa*; hypertension; losartan.