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Resumo	<p><b>Background:</b> Oxidative stress is a key mediator in the maintenance of sympathoexcitation and hypertension in human and experimental models. Green tea is widely known to be potent antioxidant.</p> <p><b>Objective:</b> We aimed to evaluate the effects of green tea in a model of hypertension.</p> <p><b>Methods:</b> Hypertension was induced by the nitric oxide synthase inhibitor [N-nitro-L-arginine-methyl-ester (L-NAME); 20 mg/kg per day, orally, for 2 weeks] in male Wistar rats. After the first week of L-NAME treatment, animals received green tea ad libitum for 1 week. At the end of the treatment period, blood pressure, heart rate, baroreflex sensitivity, renal sympathetic nerve activity, and vascular and systemic oxidative stress were assessed.</p> <p><b>Results:</b> L-NAME-treated animals exhibited an increase in blood pressure (<math>165 \pm 2</math> mmHg) compared with control rats (<math>103 \pm 1</math> mmHg) and green tea treatment reduced hypertension (<math>119 \pm 1</math> mmHg). Hypertensive animals showed a higher renal sympathetic nerve activity (<math>161 \pm 12</math> spikes/s) than the control group (<math>97 \pm 2</math> spikes/s), and green tea also decreased this parameter in the hypertensive treated group (<math>125 \pm 5</math> spikes/s). Arterial baroreceptor function and vascular and systemic oxidative stress were improved in hypertensive rats after green tea treatment.</p> <p><b>Conclusions:</b> Taken together, short-term green tea treatment improved cardiovascular function in a hypertension model characterized by sympathoexcitation, which may be because of its antioxidant properties.</p>
Fomento	