Polish Journal of Pharmacology
Pol. J. Pharmacol., 2001, 53, 5–10
ISSN 1230-6002

PROPRANOLOL PREVENTS THE DEVELOPMENT OF VENOUS THROMBOSIS IN RATS BY A PLATELET-DEPENDENT MECHANISM

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Propranolol prevents the development of venous thrombosis in rats by a platelet-dependent mechanism. M. GRUSZECKI, R. RÓŁKOWSKI, R. PAWLAK, W. BUCZKO. Pol. J. Pharmacol., 2001, 53, 5–10.

To clarify if one of the most common antihypertensive drugs, propranolol, can prevent venous thrombotic process, rats were treated with propranolol (PRO; 5 mg/kg *ip*) in an acute or chronic (14 days) manner. Both regimens resulted in a marked reduction of the systolic blood pressure ($p < 0.001$) and, probably as a consequence, in the shortening of the bleeding time ($p < 0.01$). After ligation of the *vena cava*, the incidence of the venous thrombosis and the thrombus weight decreased significantly in both propranolol-treated groups ($p < 0.01$) when compared to control rats. The antithrombotic effect of PRO was not accompanied by any changes in activated partial thromboplastin time, prothrombin time or euglobulin clot lysis time. However, long-term administration of PRO resulted in a reduction of the ADP-induced platelet aggregation.

Key words: *propranolol, venous thrombosis, platelet aggregation, rat*

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