

Abstract

The aim of this thesis was to evaluate possible changes of cell adhesion molecules expression in rabbit arteria femoralis sinistra after the administration of Daunorubicin. We focused on the expression of VCAM-1 and ICAM-1.

Chronic anthracycline cardiotoxicity was induced by administration of daunorubicin (3 mg/kg=50 mg/m² i.v., 1x week) for the period of 10 weeks. We focused on the monitoring VCAM-1 and ICAM-1 expression in rabbit left femoral artery. Ten daunorubicin group was compared with the control rabbits. The animals were killed 24 hours after the administration of daunorubicin.

Immunohistochemical analysis showed no expression of VCAM-1 in any control or experimental groups. Very weak expression of VCAM-1 was detected in control and experimental groups. However we can not propose, that this expression might not have any biological effect.

In conclusion the administration of daunorubicin did not affect either VCAM-1 or ICAM-1 expression in rabbit left femoral artery suggesting that endothelial dysfunction in this artery is not triggered by daunorubicin treatment *in vivo*.