Effects of argatroban on patients with lower extremity deep vein thrombosis

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The primary treatment of deep vein thrombosis (DVT) is systemic anticoagulation, which reduces the risk of propagation of thrombus, pulmonary embolism (PE) and the recurrence of venous thrombosis. Argatroban is a synthetic direct thrombin inhibitor that does not require anti-thrombin to provide effective anticoagulation. In the present study, we examined the effects of argatroban on patients with lower extremity DVT and evaluated the efficacy and safety of argatroban therapy in DVT patients. We considered 189 consecutive DVT patients documented by clinical scores and duplex ultra-sonography, who were randomly divided into the following three groups: 63 patients were given subcutaneous injection of low-molecular-weight heparin (LMWH) (group A), 63 patients were given continuous intravenous argatroban (group B) and 63 patients were given LMWH and argatroban (group C). Statistically significant differences in circumference at the calf and thigh levels were found in group A and C or group B and C on day 14 (p<0.05). When comparing day 0 with day 14, significant differences were determined in each group for the differences in circumference of the two legs at the thigh and calf levels (p<0.01 or p<0.001). Study on degree of thrombus regression showed the advantage of group C over group A or group B by chi-squared test. Argatroban have demonstrated promise of greater efficacy with less bleeding risk in DVT treatment. We suggest that anticoagulation with argatroban is a useful option in patients with DVT alone or combined with LMWH.

Protein SUMOylation in the adipocyte modulates inflammatory responses, diabetes and cardiovascular diseases

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