عنوان مقاله:

Partial Purification and Characterization of Anticoagulant Factor from the Snake (Echis carinatus) Venom

محل انتشار:

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خلاصه مقاله:

Objective(s): Snake venoms contain complex mixture of proteins with biological activities. Some of these proteins affect blood coagulation and platelet function in different ways. Snake venom toxin may serve as a starting material for drug design to combat several pathophysiological problems such as cardiovascular disorders. In the present study, purification of anticoagulation factor from venom of snake (Echis carinatus) was studied. Anticoagulation activity of crude venom, fractions and purified peptide were determined by using prothrombin time (PT) and thrombin time (TT). Three fractions were partially purified from the venom of E. Carinatus by gel filtration on sephadex G-۷۵ and final purification was performed by high-performance liquid chromatography (HPLC) with C۱۸ column. A purified anticoagulant factor was derived which showed a single protein band in SDS-PAGE electrophoresis under reducing condition. Results of PT and TT tests for purified peptide (EC۲۱۷) were found to be ۱۰۲±۴.۲۴۲ and < ۵ min. respectively. Determination of molecular weight revealed that the active purified peptide (EC۲۱۷) was about ۳۰ KD. In conclusion, the present study showed that the venom of E. carinatus contains at least one anticoagulant factor.

کلمات کلیدی:

Anticoagulant factor Chromatography Echis Carinatus Snake venom