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IMMUNOGENIC CAPACITY OF RADIOMODIFIED CROTALUS DURISSUS TERRIFICUS VENOM AND CROTOXIN ALONG THE TIME.

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Gamma radiation interacts with aqueous solutions forming highly reactive free radicals that interact with the solubilized proteins, promoting structural and biological alterations. This effect has been used to attenuate snake venoms and purified toxins, in a quest of the ideal radiation dose in which the immunological properties are maintained. In the present work we investigated the immunogenic capacity of radiomodified immunogens along the time.

Crotalus durissus terrificus whole venom and purified crotoxin samples were irradiated with 2000 Gy in a 2 mg/ml 0.15 M Nacl solution. Following this, rabbits were inoculated according to the classical immunization schedule and using native crotoxin as control. Sera were collected at different times and antibodies titles were determined by ELISA. Results indicate that irradiated cotoxin induced a sustained specific antibody production in the same way as native crotoxin. Despite it lower toxicity, the irradiated whole venom appears to be less efficient in sustaining antibodies level. Further investigation will be necessary in order to determinate avidity, affinity and neutralizing capacity of these antibodies.

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