

FUNCTIONAL PROPERTIES OF BATX, A MYOTOXIN ISOLATED FROM THE VENOM OF THE SNAKE *BOTHROPS ALTERNATUS*

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Introduction: Bothropic venoms cause local effects in animals, characterized by hemorrhage, edema, necrosis and intense local pain. **Objective:** In the present work, a myotoxin, here denoted BaTx, was purified by DEAE Sephacel and Sephadex G-75 column chromatography from of *Bothrops alternatus* snake venom. **Results:** BaTx displays a molecular mass of 15 kDa as estimated by sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) stained with coomassie blue, in the presence of dithiothreitol. The intramuscular injection of BaTx (50µg) into gastrocnemius skeletal muscle of Swiss mice led drastic degenerative events. The hemorrhage, muscular fatty degeneration, myonecrosis and inflammatory reaction were evident microscopically. The high presence of macrophages and polymorph nuclear leucocytes suggests that phagocytosis of cell debris already had initiated. The intraplantar injection of BaTx (5.0, 10.0 and 25.0 µg/paw) into the rat hind-paw caused edema and increase in sensitivity of pain. There is no difference on hyperalgesia and edema induced by these doses. **Conclusion:** BaTx interfere with the local myotoxic effect following envenoming by *Bothrops alternatus*.

Keyword: Snake venom, Myotoxin, *Bothrops alternatus*.