EDEMATOGENIC AND MYOTOXIC ACTIVITIES *IN VIVO* OF *LACHESIS MUTA MUTA* SNAKE VENOM AND A PHOSPHOLIPASE A_2 (LMTX-I) ISOLATED FROM THIS VENOM

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Lachesis venom causes local edema, pain, hemorrhage and necrosis and sometimes, systemic effects, like neurotoxic signs. We have showed that LmTX-I (0.5 or 1.0 μg/g) has induced myotoxic effects *in vivo* characterized by plasma creatine kinase (CK) activity increase in injected mouse tibial muscle. Histological analysis showed an intense damage in muscle cells injected with LmTX-I (1.0 μg/g), producing myonecrosis characterized by local infiltration of inflammatory cells similar to observed by *L. m. muta* venom (1.0 μg/g). We also investigated the ability of LmTX-I and the *L. m. muta* venom causing hind paw edema in mice by the subplantar injection. Venom (50 ng/g) caused a time-dependent edema that was maximal within 30 min. With the venom (500 ng/g) high concentration the edema keeps up to 48 h and was accompanied by intense hemorrhage. Pre-treating the venom with EDTA (5 mM) inhibited significantly the edema and hemorrhage. Histological examination showed that venom caused inner dermal layers thickening which was accompanied by extensive intercellular spaces. The PLA_2 also produces a significant paw edema reaction in mice.