In this work we shown the local and systemic disorders induced administration of the whole venom of *L. intermedia* and the recombinant protein dermonecrótica (rLiD1) in rabbits and the neutralization of these disorders by immunization with the recombinant protein and total venom. The inoculation of both caused edema, hemorrhage and necrosis after 6 hours in whole venom group and after 24 hours in rLiD1group. The significant systemic effects after the inoculum of total venom were changes in levels of total leukocytes, granulocytes, platelets, lactate dehydrogenase enzyme and creatine phosphokinase-MB enzyme in blood and serum of these animals. These findings predict possible infiltration of leukocytes to the tissues, leakage of blood or intravascular thrombus formation and tissue damage in heart muscle. In rLiD1group the systemic effects were less significant showing an increase in LDH and creatine phosphokinase (CK) after 72 hours and CK-MB after 7 days of inoculation, the clinical significance of the lesion also showed cardiac muscle tissue. The rLiD1 shown to be very immunogenic, resulting in high titers of anti-rLiD1 in the serum of animals immunized. They were able to neutralize *in vivo* 55% of edema, 78% of hemorrhage and 87% of necrosis resulting from challenge with rLiD1. The immunization with venom total generated high titers of anti-venom and also reactive with rLiD1, those were able to neutralize 20% of edema, hemorrhage of 82% and 90% of necrosis induced by challenge with rLiD1. In conclusion of this work, we suggest the possibility of using recombinant dermonecrotic protein in the production of anti-venoms, since, through the parameter analyzed, the systemic effects caused by the protein were lower when compared with the effects of whole venom.