

Abstract

BACKGROUND:

Previous works had shown that scorpion venom induced neurotransmitter elevation and an inflammatory response associated with various anatomic-pathological modifications. The most dangerous scorpions species in Algeria responsible for these effects are *Androctonus australis hector* (Aah) and *Androctonus amoreuxi* (Aam).

RESULTS:

Comparison of the physiopathological effects induced by the two venoms showed differences in the kinetic of cytokine release and in lung injury. The lung edema was only observed in response to Aah venom and it was correlated with cell infiltration. In order to better understand the involved mechanism in inflammatory response, we used two antagonists, atropine (non-selective muscarinic antagonist) and propranolol (β adrenergic antagonist), which lead to a decrease of cell infiltration but has no effect on edema forming.

CONCLUSION:

These results suggest another pathway in the development of lung injury following envenomation with Aam or Aah venom.