

PERIPHERAL INJECTION OF THE SPIDER *PHONEUTRIA NIGRIVENTER* VENOM INDUCES NOCICEPTION IN MICE.

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Introduction and objectives: Pain is the main local symptom presented by persons suffering accidents with *P. nigriventer*. However, the mechanisms involved in this nociception and the sensitivity to analgesic drugs are poorly known. The aim of the present study was to study the nociceptive response produced by intraplantar injection of *P. nigriventer* venom (PNV). **Results and conclusions:** After PNV injection, the amount of time spent licking, shaking or lifting the injected paw until 10 minutes was indicative of spontaneous nociception and from 0.5 to 24 hours was indicative of cold allodynia (induced by topical acetone application). PNV injection (3-10 µg/paw) produced an immediate spontaneous nociception that lasted up to 6 minutes as well as cold allodynia from 0.5 to 12 hours after injection, with effective doses of 1.6 (0.8-2.4) and 1.2 (0.5-3.0) µg/paw, and maximal effect of 147±17 and 39±5 s, respectively. Spontaneous nociception was reduced by the systemic pre-administration of morphine (10 mg/kg), dipyrone (500 mg/kg) and acetaminophen (400 mg/kg) with inhibitions of 81±12, 80±13 and 62±13%, respectively. The present result demonstrated that PNV-induced short lasting spontaneous nociception and long lasting cold allodynia. The PNV constituents and the molecular mechanisms involved in these responses are under investigation. **Acknowledgements:** CAPES, CNPq, FAPERGS. **Key words:** analgesic, venom, *Phoneutria*.