Natureza do trabalho: Resumo

TÍTULO

ANTI-HIPERNOCICEPTIVE ACTIVITY (ANALGESIC) OF S. TEREBINTHIFOLIUS EXTRACT IN PERSISTENT INFLAMMATION AND PAIN MODEL INDUCED BY FREUND'S COMPLETE ADJUVANT (CFA) IN MICE.

ELOISE BALEN, JUCICLÉIA DA SILVA ARRIGO, ANELISE S. FORMAGIO, CÂNDIDA APARECIDA LEITE KASSUYA

UNIVERSIDADE FEDERAL DA GRANDE DOURADOS, UFGD, DOURADOS, MS, BRASIL

RESUMO

Introduction: Schinus terebinthifolius (Anacardiaceae) known as Aroeira, is native to South America. In the traditional medicine is applied as anti-inflammatory agent, antipyretic and analgesic. The inflammation can be acute or chronic, being the first reaction of the body against infection and noxious stimulus. Due to searches for new anti-inflammatory agents from natural sources the extracts are being studied to validate the potential biological activities. **Objectives:** Verify the possible anti-hypernociceptive and anti-inflammatory activity of S. Terebinthifolius extract in the experimental model of Freund's complete adjuvant (FCA). **Methods:** The mechanical responsiveness of the animals was measured in the hind leg by a digital analgesiometer (von Frey). The mice were divided in groups and orally treated with S. Terebinthifolius extract (100 mg / kg), vehicle, or dexamethasone at the dose of 1 mg / kg (s.c.). One hour after oral administration or subcutaneous injection the animals received 20 □l of CFA in the paw. The measurement of the activities was daily performed analyzing mechanical hypernociception evaluated by von Frey method, the cold sensitivity by acetone test and the heat sensitivity by hot plate test. **Results and Discussion:** The treatment with S. Terebinthifolius extract significantly reversed the hypernociception induced by CFA when it is compared to the control group with more significant results on the 5th, 10th and 20th day after CFA application. In the cold sensitivity test the results demonstrate that sensitivity decreases almost twice in animals which were receiving the extract. In the heat sensitivity test the treatment with S. Terebinthifolius extract increased the time that animals remain on the hot plate compared with the control group. **Conclusion**: The search demonstrates that S. terebinthifolius extract have mechanic and thermal anti-hypernociceptive activity to cold and heat. Researches will be performed to investigate mechanisms of action and discover the active principle.