

ANTI-EDMATOGENIC AND ANTINOCICEPTIVE PROPERTIES OF LECTIN
FROM THE ALGA *HYPNEA CERVICORNIS* (HCA)

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INTRODUCTION.Lectins are (glyco)proteins with a carbohydrate-binding domain that play a key role in mediating the cell recognition. The mechanism of action and the therapeutic potential of the lectin from the alga *Hypnea cervicornis* (HCA) have not been studied yet. **OBJECTIVE.**Investigate the antinociceptive and anti-inflammatory activities of HCA and assess the involvement of its lectin domain on these effects. **METHODOLOGY.**Carrageenin-(450µg/paw;s.c) and Dextran-(500µg/paw;s.c.) paw edema were tested in male Wistar rats (n=6) (LANDUCCI, 1995). Saline (0,1mL, s.c.) and HCA(10⁻¹, 1mg/Kg;i.v. alone or dissolved with its sugar Mucin-1mg/Kg; 5mg/mL;i.v.). were administered to control and experimental groups, respectively. Nociception was evaluated in male Swiss mice (n=8) using three experimental models: acetic acid-induced writhing test (KOSTER, 1959), formalin test (HUNSKAAR,1987) and hot plate test (EDDY, 1953). Control group was treated with morfine (5 mg/Kg; s.c.) and experimental group with HCA(10⁻², 10⁻¹,1 or 10 mg/Kg; i.v.). **RESULTS.**HCA(1mg/Kg) decreased only the Carrageenin-paw edema (73%) and its association to Mucin reverted this effect. HCA reduced nociception induced by acetic acid (10⁻¹,1,10 mg/Kg; 63%,42%,71%, respectively) and decreased formalin effects at the second phase (10mg/Kg). **CONCLUSIONS.**HCA presents a cell-dependent antiedematogenic effect and an antinociceptive activity, decreasing the inflammatory pain. **ACKNOWLEDGEMENTS:**CNPq/FUNCAP. **KEYWORDS:**inflammation, red algae, *Hypnea cervicornis*.