Anti-inflammatory and immunosuppressant activity of Coprinus comatus ethanol extract in carrageenan-induced rats (Rattus norvegicus)

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Author Order	1 of 5
Accreditation	
Abstract	oprinus comatus (O.F. Mull.) is an edible mushroom that is used as an anti-inflammatory agent. Therefore, this study aims to determine the effect of inflammation treatment on symptoms alleviating, function maintenance, and inhibiting the process of tissue damage due to an increase in free radicals using drug formulations with high antioxidant compounds. This is a true experiment conducted using a Completely Randomized Design (CRD) with a post-test and a control group. The rats were divided into 6 categories, which include 1 healthy and 5 groups induced with 1% carrageenan. Out of the treatment groups, 3 were treated with ethanol extract of C. comatus fruiting body at doses of 250 (T1), 500 (T2), and 750 mg/kg BW (T3), 1 received diclofenac sodium (PC) and the other as a negative control (NC), were given extract for 14 days and induced with 0.5 mL carrageenan in paw of rats at day 15. The qualitative identification showed the extracts contains flavonoid, polyphenol, alkaloid, triterpenoid, steroids and saponins, and GC-MS analysis showed 10 putative metabolites compound. T2 group significantly decreased the levels of IL-1ÃŽÂ² (70.63%), IgE (59.04%), total leukocyte count (31.24%), plantar thickness (12.5%), edema volume (33.3%), and increased endothelial NO levels (48.2%).
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