1-\Evaluation of the possible antioxidant effects of soybean and Nigella sativa during experimental hepatocarcinogenesis by nitrosamine precursors

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Abstract

This study was designed to evaluate the possible antioxidant and antihepatocarcinogenic effects of soybean (SB) and Nigella sativa (NS) in rats administered nitrosamine precursors dibutylamine and sodium nitrate in the drinking water. Rats were randomly divided into four groups, each containing 48 animals. Group I (control), group II (dibutylamine (DBA) + NaNO3), group III (DBA/ NaNO3 + SB treated) and group IV (DBA/ NaNO3 + NS treated). Markers of oxidative stress [reduced glutathione (GSH) and nitric oxide (NO)] and the levels of HER-2/neu, bcl-2 and p53 proteins were investigated in rats liver after 2, 4, 6, 8, 10 and 12 months. The data revealed an improvement in the status of oxidative stress represented as the compensation of GSH levels after 2 and 4 months and reduction of NO levels after 2 months; a significant improvement in the levels of HER-2/neu protein after 6 and 4 months in rats fed SB and NS, respectively. Although, the level of p53 protein was ameliorated compared with the treated with nitrosamine precursor rats, it was maintained in a lower levels compared with the time matched points of the normal controls until 12 months Both SB and NS improved the levels of bcl-2 after 2 months in both groups. The data suggested that oral feeding of the diet containing SB and NS antagonized the oxidative stress effects induced by DBA/ NaNO3.

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3-Scanning electron microscope observations on the digenean intestinal parasite Astiotrema reniferum (Plagiorchiidae).

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Abstract

The body surface of adult digenean intestinal parasite Astiotrema reinferum (Looss, 1898) Stossich, 1904 has been studied using scanning electron microscopy (SEM). The posterior region of the body forms a slender stalk terminating with two ventrolateral lobes. The lobes are armed with numerous large spine that are sharply pointed and orientated in all directions. There are regional variations in the distribution of spines all-over the body. The spines are abundant on the general body surface of the head region, the rim of the oral sucker, the inner lip of the ventral sucker and on the posterior ventrolateral lobes. No spines were observed on the genital pore and on the excretory opening. The sensory papillae found on both the oral and ventral suckers are arranged in a bilateral symmetrical patterns. They are dome shaped but some of them possess a short knob-like process and others have no process. The papillae are more abundant on the oral sucker than on the ventral sucker. The possible functions of the spines and sensory papillae are discussed relative to their position.

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	veterinary
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Trematoda	*ultrastructure
Trematode Infections	parasitology
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4-EFFECT OF SOYBEAN FEEDING ON EXPERIMENTAL CARCINOGENESIS .3. CARCINOGENECITY OF NITRITE AND DIBUTYLAMINE IN MICE - A HISTOPATHOLOGICAL STUDY

MOKHTAR, NM (MOKHTAR, NM); ELAASER, AA (ELAASER, AA);

ELBOLKAINY, MN (ELBOLKAINY, MN); IBRAHIM, HA (IBRAHIM, HA);
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