

## **Histopathological Alterations in the Spleen Following Formalin-Induced Acute Dermatitis of Male Rats**

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### **Abstract**

Formalin is one of the liquid materials handled by the laboratory in particular and manufactured in general. It is also incorrectly disposed of and likely to be scattered to the main estuaries, which may significantly affect aquatic and wild animals. The primary goal of the study was to determine the changes in body tissues, particularly the spleen. The experiment involved taking five male rats for each group, injected with a saline solution under the skin of the rats, and considered this group to be the control group, which was called group (A). Group (B) was injected with a 2% diluted formalin solution under the skin for a week every 72 hours. The experiment on five other animals, with injections of the same substance and quantity under the skin, lasted for two weeks and was called group (C), comparing the results of the totals with some. The results of the tissue sections after routine staining (H and E) showed that the effect of formalin in group B was greater than in group C. After these totals were compared with the control group A, showed atrophy of the white and red pulp in the spleen. The atrophy of the white pulmonary lymphocytes includes loss of lymphocytes in T cells, and B cells. The study revealed that exposure to formalin causes significant alterations in spleen tissue the longer the exposure period.

**Keywords:** formalin; spleen; inflammatory.