

### 3 ANGIOTENSIN I CONVERTING ENZYME ACTIVITY IN CYCLOPHOSPHAMIDE INDUCED PULMONARY FIBROSIS IN RATS

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Cyclophosphamide is a nitrogen mustard-type drug widely used as an antineoplastic and immunosuppressive. Though cyclophosphamide has proven less toxic than earlier nitrogen mustards, it damages lung tissue and elicits a progressive fibrotic lesion. Early changes included endothelial cell and membranous pneumocyte disruption and sloughing. The endothelial cells of the lungs are an important source of angiotensin I converting enzyme (AICE) and they seem to be the first cells of the respiratory system which are damaged following cyclophosphamide administration. In the present study, male albino rats received 20mg/100g body weight of cyclophosphamide intraperitoneally and were killed after 7, 14, 21 and 28 days. Control rats received distilled water only. A marked reduction in body weight of experimental animals was noted from 5th day onwards. Lung tissue and serum from control and experimental animals were analysed for AICE activity. We noticed a decrease in lung AICE content and a concomitant rise in serum AICE in treated animals. The serum AICE level paralleled the lung value. Our observation suggest that the serial measurement of AICE levels may be potentially useful as a true predictor of the degree of pulmonary fibrosis.

### 4 GLYCOLYTIC ENZYMES ACTIVITIES IN GRANULATION TISSUE OF RATS: ROLE OF HONEY

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Use of honey from ancient to the present for its reputed wound healing and antiseptic properties is well established. Recently, we have demonstrated that administration of honey resulted in accelerated formation of collagen at the wound site and elevated level of embryonic collagen. It is known that energy is required for collagen synthesis and that glycolysis is the most important source of energy for fibroblasts. Hence we examined the effect of honey on the levels of glycolytic enzymes activities in granulation tissue. The key enzymes such as hexokinase, phosphofructokinase,