The effects of imidazole on pulmonary damage induced by bleomycin

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Bleomycin may produce diffuse pulmonary damage. Our objective was to evaluate the effect of imidazole, a thromboxane-synthetase inhibitor, on pulmonary damage induced by endotracheal instillation of bleomycin in rats. Bleomycin 1 U/100 g body weight produced diffuse pulmonary damage and increased number of inflammatory cells after 3 days, hemorrhage and focal fibrosis after 7 days, and diffuse fibrosis and pneumocyte hyperplasia after 14 to 30 days. Imidazole 5 mg/100 g body weight, given intraperitoneally 30 min before bleomycin, decreased the 3rd day lesions without altering the histopathology in subsequent periods. Imidazole reduced ($p < 0.05$) the increases in cell number (3rd and 14th days) as well as in proteins in bronchoalveolar lavage (3rd day), without modifying the increase in phospholipids observed in rats treated with bleomycin. We conclude that imidazole decreases initial bleomycin-induced pulmonary damage, but it does not interfere with fibrosis and late development of ep