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제 목	Inhibitory Effect of Cortex Mori on Ovalbumin-induced Late Asthmatic Reaction in Guinea pigs.
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내 용	<p>Cortex mori (<i>Morus alba</i> L.), the root bark of mulberry tree, has been used as an antiphlogistic, diuretic, and expectorant in herbal medicine. The purpose of this study was to determine whether Cortex mori could inhibit the ovalbumin (OA) -induced late asthmatic reaction in guinea pigs. Guinea pigs were sensitized by two exposures to an aerosol of OA(1.0%) and then challenged with aerosolized antigen(2.0%). The animals were pretreated by three inhalations of the aerosoled Cortex mori either before antigen sensitization or challenge. Bronchoalveolar lavage fluid(BALF) and peripheral blood were collected at 17 hours after OA challenge. The cell populations in BALF and peripheral blood were examined to determine the changes of the relative proportions of eosinophils, neutrophils and mononuclear cells etc. Beta-glucuronidase activity in BALF was measured to evaluate the alveolar macrophage activation. OA-induced histamine release from guinea pig peritoneal fluid cells was measured by radioisotope enzymatic assay. Results were as follows. The number of eosinophils, neutrophils and lymphocytes recovered in BALF were significantly increased in the 17h following aerosol challenge with OA. Among them, eosinophil and neutrophils were decreased remarkably in group that had been preinhaled with Cortex mori. The number of lymphocytes in BALF were not decreased in group pretreated with CM before sensitization but decreased in Group pretreated with CM before challenge. After OA challenge, the number of eosinophils in peripheral blood were markedly increased, but Cortex mori inhibited significantly the OA-induced eosinophilia. Beta-glucuronidase activity in the supernatants of BALF were significantly increased in the 17h following aerosol challenge with OA, however, pretreatment of Cortex mori had no influence on Beta-glucuronidase activity, suggesting that Cortex mori had no inhibitory effect on OA-induced alveolar macrophage activation. Cortex mori inhibited the OA-induced histamine release from guinea pig peritoneal fluid cells. From the above results, it is suggested that Cortex mori contains some substances with an activity to inhibit the the OA-induced late phase reaction of the bronchial asthma in guinea pigs.</p>