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Antitumor activity of some kinds of crude drugs.

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A study was carried out to examine the antitumor activity of aqueous extracts from 8 kinds of crude drugs. *A. capillaris*, *S. doederleinii*, *A. macrocephala* and *S. subprostrata* inhibited the tumor growth inoculated in BALB/c mice and prolonged the survival time. *A. capillaris* and *S. doederleinii* also exhibited the in vitro cytotoxicity against Meth A sarcoma and L-929 cells. *A. capillaris* exhibited a significant inhibition of the growth of Meth A sarcoma inoculated in BALB/c-nu/nu mice. In BALB/c-nu/+ mice, however, all 4 drugs showed the antitumor activity. These results suggest that *A. capillaris* shows the antitumor activity through mainly a direct cytotoxic action, and the other 3 drugs display the activity through the host-mediated action.

[Igaku no Ayumi, 138, 537 (1986)]

On Slow Reacting Substance of Anaphylaxis (SRS-A) in Experimental Cerebral Ischemia.

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In an experimental cerebral ischemia produced by 30 minutes of four-vessel occlusion followed by recirculation in rats, levels of brain free arachidonic acid were analysed by high performance liquid chromatography and concentrations of brain slow reacting substance of anaphylaxis (SRS-A) by bioassay. 30 minutes of cerebral ischemia increased the size of free arachidonic acid about 8.5 times. The accumulation of free arachidonic acid during ischemia was reversed within 60 minutes of recirculation. Recirculation of ischemic brain significantly increased concentrations of brain SRS-A. These experiments demonstrated that lipoxygenase products of arachidonic acid were produced during recirculation period following cerebral ischemia.

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Inhibition of IgE Antibody Formation by n-Pentyl α -L-Sorbopyranoside.

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Effect of n-pentyl glycosides and alkyl α -L-sorbopyranosides on IgE antibody formation in rats and mice were investigated. When n-pentyl α -L-sorbopyranoside was given subcutaneously or orally, the IgE antibody formation in rats and mice was suppressed, while no suppression of hemagglutinin formation was observed. The study on timing of administration indicated that n-pentyl α -L-sorbopyranoside significantly suppressed the secondary IgE antibody response when administered before the secondary immunization. These results suggest a possibility that the enhanced production of IgE antibody in atopic patients might be selectively regulated by n-pentyl α -L-sorbopyranoside.