(Int. J. Immunopharmac., 9, 881 (1987))

Effect of Immunostimulants and Antitumor Agents on Tumor Necrosis Factor (TNF) Production.

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OK-432 showed a priming activity for TNF production in mice associated with an increase of spleen weight. OK-432 and PSK potentiated the TNF production in mice caused by *Corynebacterium parvum* and *E. coli* endotoxin. 5-Fluorouracil, cyclophosphamide and bleomycin suppressed the TNF production, and the suppression was partially restored by the combined treatment with OK-432 or PSK. These results suggest that the administration of cytotoxic antitumor agents suppress the intrinsic TNF production in cancer patients, and the combined use of immunostimulants such as OK-432 and PSK is advantageous in restoring TNF production suppressed by cytotoxic antitumor agents.

(J. Pharmacobio-Dyn., 10, 49 (1987))

Pharmacological Studies on the Release of Slow Reacting Substance of Anaphylaxis during Anti-Immunoglobulin E Antibody Mediated Passive Peritoneal Anaphylaxis in Rats.

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The release of SRS-A by anti-IgE antibody-mediated passive peritoneal anaphylaxis in rats was investigated. A significant amount of SRS-A was released in the peritoneal cavities of rats passively sensitized with IgE. The release of SRS-A was initiated at 2 min reached its maximum 5 to 10 min after the injection of anti-IgE antibody. Anti-allergic agents, glucocorticoids and p-bromophenacyl bromide inhibited the release of SRS-A and histamine. AA-861 and dextran sulfate only inhibited the release of SRS-A. Indomethacin and cytarabine inhibited the release of histamine but not SRS-A.

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Specific Suppression of Antigen-Antibody Reactions by a Dialysate from Dermatophagoides farinae.

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Mite dialysate prepared from an extract of house dust mite suppressed 48-h homologous PCA in rats caused by a non-dialyzable fraction of the mite extract (mite antigen), and the suppression was dose-dependent with a high specificity for the antigen. Fraction 3 obtained from the dialysate suppressed PCA in rats and guinea pigs more potently than the dialysate. Histamine release from sensitized rat peritoneal exudate cells was suppressed dose-dependently by fraction 3, but fraction 3 stimulated the release of histamine by itself slightly. These results suggest that certain haptenic substances might be present in the mite dialysate.