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The susceptibility of experimental glomerulonephritis in six different strains of mice.

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An experimental glomerulonephritis was produced in 6 strains of mice by an injection with a sub-nephrotoxic dose of nephrotoxic serum after immunization with rabbit IgG. The highest susceptibility was observed in C57BL/6 mice with a high reproducibility. The excretion of protein in urine, the elevation of serum cholesterol and blood urea nitrogen level and the decrease of serum albumin were observed. Typical histopathological changes in the kidney were crescent formation in glomeruli, thickening of glomerular basement membrane and cast of urinary tubuli. Cyclophosphamide inhibited the development of nephritis in C57BL/6 mice. These results suggest that this model is useful for immunopharmacological studies of nephritis.

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Immunoglobulin E antibody production against house dust mite, *Dermatophagoides farinae*, in mice.

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IgE antibody production against *D. farinae* extract (mite antigen) was studied in female BALB/c mice. IgE antibody production was induced not only by an intraperitoneal injection of mite antigen in the presence of alum but also by a subcutaneous injection of the antigen in the absence of adjuvant. However, the primary response was not observed in the case of adjuvant-free immunization. Intranasal administrations of mite antigen alone also induced the IgE antibody production. Two exposures to mite antigen, intranasally, were sufficient for eliciting the IgE antibody production. These results indicate that the intranasal administration of mite antigen is very effective.

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Reduction of antigen-induced contraction of sensitized guinea-pig tracheal smooth muscle *in vitro* by calmodulin inhibitors.

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The effect of two calmodulin inhibitors, R 24571 and chlorpromazine, on antigen-induced contraction of guinea-pig tracheal smooth muscle was studied. Contraction of sensitized guinea-pig trachea induced by antigen challenge was reduced. They effected relaxation of contraction induced by histamine and LTD₄, but had no effect on resting tone. Histamine- and LTD₄-induced concentration-contraction curves were shifted to the right by calmodulin inhibitors. They produced a down-ward displacement of the maximum, without a parallel shift in histamine- and LTD₄-induced curves. Calmodulin inhibitors did not affect the antigen-induced release of mediators from sensitized guinea-pig lung tissue.