

AN *IN VITRO* STUDY OF IgE PRODUCTION IN SEVERE ATOPIC DERMATITIS

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Peripheral blood lymphocytes from 4 patients with severe atopic dermatitis and with high serum IgE levels produced measurable amounts of IgE in vitro in repeated tests. These patients had increased numbers of IgE-bearing peripheral blood lymphocytes on at least one test occasion. No measurable IgE production in vitro was found in 6 other patients with atopic dermatitis and in 3 healthy controls. Inhibition of the IgE production was observed following treatment with PHA, Con A, PWM, mixed lymphocyte culture and radiation. LPS and histamine induced neither definite stimulation nor inhibition of IgE production. Supernatants from Con A stimulated cells were used in tests for suppressor factors. The hypothesis that depressed suppressor function of the T cells might be responsible for the tendency to increased IgE production in atopic dermatitis is discussed.

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DISCUSSION

Saurat (Paris). Q: Have you compared the IgE levels in serum with in vitro production of IgE?

A: All the 4 patients who produced IgE in vitro had high IgE levels. The patient who had the highest IgE level in serum also produced most IgE in vitro.

Saurat (Paris). Q: Have you looked at the kinetics of the IgE production, and are you sure that it is a production and not an adsorption and then release?

A: I always counted IgE in the supernatant from cultures where the cells were killed before the culture period and subtracted this when counting production. The amount of IgE increased up to day 7 and after that there was a plateau.

Hanifin (Portland). Q: I was especially interested in the histamine—I think you used 10^{-3} Mol histamine to stimulate the cells, and you said there was no stimulation of IgE production?

A: I used histamine in different concentrations but never got anything that could change the IgE production when I introduced histamine from day 0.