Allergy & Immunity

Myasthenia Gravis

"Myasthenia Gravis is an autoimmune disease. The elevation of serum and cerebrospinal fluid IgG in these patients has been noted. It was recently reported that a specific antibody against the receptor of acetylcholine had been found in 85% of patients with MG and that the major component of this antibody is IgG. HBO therapy revealed an effect on the concentration of serum immunoglobulins, particularly in IgG."

"These findings suggest that HBO may affect immunosuppressant of the organism. The preliminary results of our trial indicate that HBO therapy is of benefit to MG sufferers, its effectiveness approaching 100% in the short term and 87.5% in the long term." [Up to three years following cessation of the therapeutic course]

"Patient usually recovered completely and led active daily lives following completion of HBO therapy alone without the need to take drugs."

"It is worthwhile mentioning that the response of HBO with Dexamethasone was superior to that of HBO alone. HBO therapy reduced the side effects of Dexamethasone and the transient exacerbation of the illness at the beginning of Dexamethasone therapy alone. The combination of HBO with Dexamethasone might have had a synergic effect on the response."

PROTOCOL:

HBO ALONE: 2.5 ATA / 60 min / q.d. / Total Tx to 30

HBO & DEXAMETHASONE: 2.5 ATA / 60 min / q.d. DEXAMETHASONE 10-20 mg / q.d. for 15-20 days tapered to maintenance dose.


RISK of Connective Tissue Disorders among Breast Implant Patients

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... In a US retrospective cohort study (1960–1996), 351 (4.8%) of 7,234 patients with breast implants and 62 (2.9%) of 2,138 patients who had undergone other


Risk of Connective Tissue Disorders among Breast Implant Patients

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In a US retrospective cohort study (1960–1996), 351 (4.8%) of 7,234 patients with breast implants and 62 (2.9%) of 2,138 patients who had undergone other types of plastic surgery reported subsequent rheumatoid arthritis (RA), scleroderma, systemic lupus erythematosus, or Sjögren’s syndrome (relative risk = 2.0, 95% confidence interval (CI): 1.5, 2.8).

Risks of RA, scleroderma, and Sjögren’s syndrome were elevated both before and after 1992, when the Food and Drug Administration changed the status of breast implants to investigational. When records for these diseases were retrieved (35–40% retrieval rate) and blindly reviewed, two expert rheumatologists assessed only a minority of the cases as being "likely" (e.g., regarding RA, 16.5% for implant patients and 23.5% for comparison patients).

Recalculation of incidence rates using "likely" diagnoses found relative risks of 2.5 (95% CI: 0.8, 7.8) for RA, scleroderma, and Sjögren’s syndrome combined and 1.9 (95% CI: 0.6, 6.2) for RA only. When the proportions deemed "likely" were applied to all self-reports, the estimated relative risks were 2.0 (95% CI: 0.7, 5.4) for the three disorders combined and 1.3 (95% CI: 0.5, 3.8) for RA.

These results indicate that self-reports of connective tissue disorders are influenced by reporting and surveillance biases. Given the diagnostic complexities of these diseases, excess risks, if they exist, may be beyond detection even in a study of this size. Key Words: arthritis, rheumatoid; breast implants; connective tissue diseases; risk; scleroderma, systemic; Sjögren’s syndrome Abbreviations: CI, confidence interval; CTD(s), connective tissue disorder(s); RR, relative risk.

Jiang Yunshen, Yu ping, Song ling, Zhang Yanzhi, Wang Xinru

Effect of hyper-baric oxygen on allergy and immunity

Abstract:

To explore the effect of hyper-baric oxygen(HBO) on type I allergic reaction and some parameters of immune function. Test animals (rats, mice, rabbits) were divided into two HBO groups(HBO treatment for 5 or 10 days) and control group. The HBO treatment was pure oxygen(99.5%) inhalation for 2 hours each day under 0.20 Mpa abs pressure. Then the evidence of type I allergic reaction and changes of some immune function indexes were measured and analyzed.

HBO treatment alleviate homo-passive skin allergic reaction in rat and hetero-passive skin allergic reaction in mice . It also inhibited the tyroxine induced mast cell degranulation in mice and markedly reduced peripheral blood T-lymphocyte in rabbits, and significantly decreased the number of antibody producing cells in mice.

HBO treatments were shown to prevent the occurrence or alleviate the type I allergic reaction in the Laboratory animals. Both the cellular immune function and body fluid immune function were inhibited remarkably.

Key Words: Hyper-baric oxygen, Immune, Type I allergic reaction.

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Green Tea May Protect Against Autoimmune Diseases

By Kathleen Doheny
HealthDay Reporter

FRIDAY, June 17 (HealthDay News) -- Green tea, already lauded for its cancer-fighting ability, may also protect against certain autoimmune diseases, new research suggests.

Green teas inhibit the expression of antigens made by the body, substances that can trigger an immune response, explained study author Stephen Hsu, an associate professor in the School of Dentistry at the Medical College of Georgia in Augusta. He is to report on the research Sunday at the Arthritis Foundation's Arthritis Research Conference in Atlanta.

He focused on EGCG, a substance found in green tea known to suppress inflammation, and its effect on skin and salivary gland cells. In one autoimmune disorder, Sjogren's syndrome, the salivary glands are affected, causing dry mouth. In another autoimmune disorder, lupus, the skin is affected.

Hsu's team isolated 130 autoantigens from cells and exposed them to EGCG. Autoantigens are molecules in the body with useful functions, according to Hsu, but changes in either their amount or their location can result in an unwanted immune response.

Of the 130 autoantigens "most were inhibited or without changes" when exposed to the EGCG, he said. "Among them, a group of key autoantigens were inhibited."

While the research is very preliminary, he said, eventually green tea might help protect cells from being attacked by the autoantigens. Besides applications for the dry mouth that affects those with Sjogren's, Hsu said green tea might prove useful for the skin found in lupus.

The Georgia researcher speculated that EGCG modulates the presence of the autoantigens, in addition to its ability to suppress inflammation.

According to Hsu, other research with green tea in animal models has shown it can reduce arthritis.

The new study is "a significant beginning," said Nihal Ahmad, an assistant professor of dermatology at the University of Wisconsin at Madison, who was part of a team in 1999 that showed that polyphenols (of which EGCG is one) in green tea could prevent induced arthritis in mice.

The Hsu research, he said, "appears to have great potential," though it "needs more work." However, "based on the cell culture study, we can only say that we can be hopeful."
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