

PROCEEDINGS

COMMUNICATIONS

GESELLSCHAFTSVERHANDLUNGEN

BRITISH ALLERGY SOCIETY

The Summer Meeting of the Society was held at the Royal Society of Medicine, London, W. 1. on 7th. June, 1969.

Scientific Programme

The speakers were: Professor C. M. Wilson (Dublin) on "Ascorbic Acid and Upper Respiratory Inflammation", Mr. R. Donovan (London) on "Immunoglobulins in Nasal Polyp Fluid", Dr. J. Brostoff (London) on "The Diagnosis of Perennial Rhinitis", Dr. G. Taylor (Manchester) on "Nasal Provocation Testing", Dr. L. H. Capel (London) on "Disodium Cromoglycate for Perennial Rhinitis in Allergic Subjects".

K. M. Citron, M. D., F. R. C. P.

Honorary Secretary

ASCORBIC ACID AND UPPER RESPIRATORY INFLAMMATION *by* C. W. M. WILSON and H. S. LOH, The Department of Pharmacology, Trinity College, University of Dublin, Dublin 2.

Problems of definition of the disease, and of classification of the symptoms, arise in clinical trials concerned with the upper respiratory inflammation associated with the common cold. (Wilson, *British Medical Journal*, June 1967, 1, 698-699). In this acute inflammation, ascorbic acid is said to produce its protective effect both by virtue of its prophylactic action, and as a result of its therapeutic effect when the signs of the cold appear. Certain criteria therefore must be satisfied regarding the definition of symptoms and design and analysis of the investigations; and in respect of the purpose and dosage of ascorbic acid, if valid conclusions are to be obtained when the effect of ascorbic acid is being assessed in clinical trials on the common cold. Symptoms must be defined and their duration measured; trials must be double blind and their therapeutic or prophylactic purpose must be stated; the sex of the subjects must be specified and their environment should be controlled; the number of subjects and duration of the trial must be such that a

reasonable statistical analysis of the results can be carried out; it is desirable that measurements of ascorbic acid metabolism should be performed during the course of the trial in order to correlate changes in the symptoms with the form of therapy administered.

These criteria have been investigated during the last four years, during which 200 mg tablets of ascorbic acid and dummy tablets were administered daily to children in boarding schools during the seven winter months. The presence or absence of symptoms of the common cold, (*Tyrrell* 1965) was recorded daily. The results are now described from one female school containing 103 subjects of whom 57 received ascorbic acid and 46 received dummy tablets.

As a result of computer analysis it was found that the symptoms in all the children could be separated into two unrelated groups consisting of sore throat, headache, feverish and out of sorts, defined as toxic colds; and cold in the head, cough, nasal obstruction and nasal discharge, defined as catarrhal colds. Ascorbic acid reduced the incidence, duration and severity of these symptoms in comparison with those in children receiving dummy tablets. The form of the toxic and catarrhal colds was also significantly altered so that symptom association was reduced in the presence of ascorbic acid. Duration of the symptoms, cold in the head and nasal discharge, in catarrhal colds, were reduced from fourteen to eight days in children receiving ascorbic acid. The girls who had received 200 mg ascorbic acid daily for three months had a level 60 ug/10⁹ cells ascorbic acid in their white blood cells which was significantly higher than in the girls who received dummy tablets. The latter had a level of 42.5 ug/10⁹ cells. Other measurements demonstrated that the plasma values of ascorbic acid is altered in young adults who have symptoms associated with the common cold. It is concluded that the prophylactic administration of ascorbic acid to young adults significantly reduces the intensity of the symptoms, and form of their association, in the common cold. This effect is correlated with a significant elevation in the tissue level of ascorbic acid.

IMMUNOGLOBULINS IN NASAL POLYP FLUID *by* R. DONOVAN, S. G. O. JOHANSSON, H. BENNICH and J. F. SOOTHILL

Nasal polyp fluid and serum concentrations of albumin, α macroglobulin, IgE, IgG, IgA and IgM, polyp histology, and a clinical assessment of reagenicity have been studied in 29 patients with nasal polyps.

The concentrations of albumin and α macroglobulin in the polyps are consistent with poorly selective filtration from serum.