

MEDICINE

Tells of Asthma Treatment

MRS. EISENHOWER'S recent attack of acute bronchial asthma has focused national attention on this ailment.

Asthma is no respecter of either age, social or economic status. Infants as well as octogenarians may have asthma. However, it is more prevalent in those under fifteen and in age groups from 25 to 44. Less than half of the 8,000,000 asthma sufferers in the United States receive treatment from a physician.

Too often, particularly among the low-income groups, treatment is limited to purchase of advertised cure-alls.

The three-week period of hospitalization for Mrs. Eisenhower is not exceptional but is in keeping with accepted medical treatment for patients with an asthma severe enough to indicate hospitalization.

While not necessarily dangerous in a fatal sense, the type of attack which would prompt hospitalization is generally so severe that the patient cannot easily eat or drink because of difficulty in breathing. Status asthmaticus is the medical term for an attack of this sort.

"A patient with status asthmaticus gasps for breath as though he had run a mile on a tread-mill. It is both painful and frightening," Col. Harold E. Ratcliffe, chief of the Allergy Clinic at Walter Reed Army Hospital, Washington, D. C., reported.

The first thing that is done for such a patient is to administer medication which will relax the bronchial muscles and allow more normal breathing. After the patient is relieved, the doctors begin a thorough examination which may include chest and nose X-rays as well as routine check of heart functioning, pulse rate, blood pressure, and other areas necessary for a full picture of the general physical condition. A history of the patient's previous asthma attacks is of prime importance in prescribing treatment.

If the asthma appears to stem from an allergic or sensitive condition, skin tests may be advised. But under any circumstances, these are secondary to the general examination and history.

"We think of asthma, not as a disease, but as a symptom or manifestation of an illness or disease just as congestive heart failure may be due to causes other than diseases of the heart itself," explained Col. Ratcliffe.

Perhaps the most prevalent cause of asthma is allergy or sensitivity. Col. Ratcliffe describes the allergic patient as one who has "harmful reactions to harmless substances." These can be such substances as eggs, milk, feathers, house dust, grasses or other pollens.

Another big group of asthma sufferers are those sensitive to infections such as those that cause colds or sinus congestions. Quite commonly both the allergic and infectious sensitivity may be combined.

Col. Ratcliffe debunked the theory that asthma may be the result of anxiety.

"Purely psychogenic asthma," he said, "is very unusual. I would say, it is rare." However, he did emphasize that stress or anxiety may intensify an asthma attack, although it may not initiate one.

The basic treatment of asthma is often very simple once you have determined what is causing it, according to the Walter Reed specialist. "Remove the object or substance to which you are sensitive from your environment," he advises.

Col. Ratcliffe observed that in the event of a sensitivity to pollen, grasses, or house dust, this may not be feasible. Here he suggests hyposensitization. This is the injecting under the skin of an extract of the substance to which the patient is allergic until the patient develops an immunity to it.

However, such extensive treatment as required by hyposensitization is not necessary if the allergic asthmatic patient responds well to any of the anti-histamines or asthma medications recommended by a reputable physician.

There is no known cure for asthma, but it can be effectively treated and controlled so that the asthmatic can lead a very normal and useful life.

Science News Letter, July 9, 1960

MEDICINE

Smoking, Heart Disease Linked in Studies

A POSSIBLE relationship between heavy cigarette smoking and coronary heart disease is indicated but not proved in a new report by the American Heart Association in New York.

Studies of middle-aged men show that death rates from heart attacks were from 50% to 150% higher among heavy smokers than among those who do not smoke cigarettes.

Further study is needed to prove that the statistical facts are sufficient evidence and also to determine the effects of smoking on other aspects of heart disease, the Association says.

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Lab Boasts Monkey Floor, Unique Air Conditioning

BUILDING 29, a new \$3,500,000 structure of the National Institutes of Health in Bethesda, Md., boasts a unique air-conditioning system that assures triple-filtered air which is not recirculated throughout the building.

Building 29 is designed for NIH's Division of Biologics Standards which is responsible for the control of biological products such as vaccines and serums sold in the United States.

Because many of these products are derived from living organisms, such as bac-

teria and viruses, and because all by their nature are potentially dangerous, close surveillance of production and constant improvement in quality is essential.

The building's sterile rooms are stainless steel chambers. One is even equipped with an exhaust that incinerates the air as a safety precaution.

Twelve thousand square feet of laboratory space on the first four floors will house bacteriology, virology, rickettsiology, immunology, chemistry and hematology laboratories.

Monkeys take over the fifth floor where doctors and laboratory technicians will use them to test vaccines. This area will have its own private elevator.

Science News Letter, July 9, 1960

SCIENCE NEWS LETTER

VOL. 78 JULY 9, 1960 NO. 2

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

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Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



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