

Toward a normal life

Most asthmatic children may indulge in active play except during acute attacks

by Faye Marley

Asthma has dozens of causes and a few means of treatment. The narrowing of the smaller bronchial tubes that causes the typical gasping and wheezing of the asthmatic child can restrict his activity and open him up to infection by other diseases.

But most of the three million asthmatic children in the United States are not destined to be invalids, according to Dr. Elliot F. Ellis, chief of pediatrics at the National Jewish Hospital in Denver, which specializes in asthma and other respiratory diseases.

What's more, a moderate amount of exercise seems to improve the condition, as a recent experiment with more mature asthma patients showed.

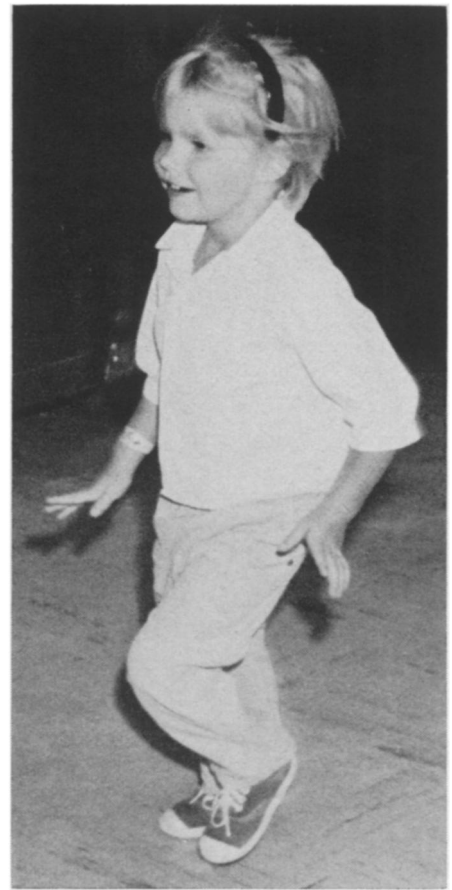
The 39 patients, aged 15 to 35, were divided into two groups to find out what effect physical exertion had on them. They had been sent to the hospital by their physicians because of failure to respond to outpatient treatment.

During a three-month period, one group took part in routine hospital activity only, while the other group had two hours of exercise each day. The first hour was devoted to such calisthenics as push-ups, weight-lifting and pedaling a stationary bicycle. During the second hour they took part in competitive sports such as basketball and soccer.

At the end of three months the groups exchanged places. None was made worse by the exercise. Three out of four showed an increase in oxygen uptake.

The results of the experiment have been applied to younger patients, and exercise therapy is a regular part of treatment at the hospital for asthmatics who can handle it without harm.

The restriction of activity to the quiet side of exhaustion still holds, however, and exercise therapy is only one of the partial palliatives for the disease. Most



National Jewish Hospital
Asthmatic, but not allergic to exercise.



National Jewish Hospital

Breathing is normal as youngsters forget wheezing episodes in a soccer game.

important still remains the identification and avoidance of specific allergy-producing substances, which can range from dust to pollen to cat fur to mold on a pillow. Antigen injections help some patients.

That technique can be effective for about half the cases of bronchial asthma—those that result from external antigens. For the other half, intrinsic or infectious asthma, there is no evidence of hypersensitivity to specific allergens.

However, says Dr. William B. Sherman of Columbia University's College of Physicians and Surgeons, there is considerable evidence that infective asthma results from specific hypersensitivity to the bacteria present in an infection.

In the long run, the cure for infective asthma, as well as the extrinsic type, will have to come from a better definition of the process by which the allergic reaction takes place.

In an effort to organize the varied and contradictory effects of different antigens, climates, emotional states and therapies, the Children's Asthma Research Institute and Hospital in Denver is preparing a computer program that would take into account all pertinent information gathered from physicians and clinics over the country. The program is aimed at testing broad concepts of the origin and causes of asthma.