

GRAND ROUNDS
February 4, 1959

Record [redacted] is a 6 year old white boy who was brought to [redacted] from [redacted] for investigation of: (1) recurrent attacks of asthma, (2) to learn the cause of frequent episodes of "weak spells", loose large stools associated with severe abdominal cramps, vomiting, pallor, cold sweats, fatigue and at times blueness of the fingers and hands.

A typical episode which the mother terms "weak spell" consists of the child coming to his mother and explaining that he does not feel well and puts his head in her lap and sleeps for a few minutes. At times he does not sleep but is weak, slightly pale, and even becomes cold and clammy. Occasionally he may be incoherent. Some episodes start with vomiting and there are severe abdominal cramps with large loose stool; fingers and hands will become blue and at times cold. The mother has learned that it helps to bring the child back to normal to have him eat something like milk, cream and banana. He will act very hungry and eat several portions. At other times the mother has given him enemas containing a solution of sugar in water, which has been of considerable help. She estimates that she has done this approximately 25 times in the past few years. Asthma may at times be a part of the episode, but not always. There is no clear-cut evidence that tension or anxiety brings on an episode.

Apparently this boy has had various manifestations of allergic disease since infancy. It was first noted at the age of 6 months that he had hives; these disappeared when the formula was changed to Similac. He has since had hives on a number of occasions. About the age of 2½ years he had his first severe episode of asthma and since that time he has had recurrent asthma. At times these attacks are quite severe, although it is true that during the past nine months they consist of mild wheezing without labored breathing. In [redacted], 1956 this boy was studied by an allergist in Denver. Passive transfer tests revealed at that time extremely large reactions to all the common inhalants, (molds, weeds, dust, tree pollens, grass pollens, cat dander, dog dander, feathers, silk, tobacco), and to almost all foods. A year later skin tests were done by a doctor in [redacted] with approximately the same results. His mother is aware that the following foods will produce difficulties: wheat, raw eggs, citrus fruit, nuts, peanuts, chocolate and apple. She also knows that the following inhalants will produce respiratory allergy--chiefly asthma: house dust, grass, dead leaves, cat, cold air, worse if it is damp. Interestingly enough, infection seems to play a minor role in the case of this patient. The Denver allergist prepared an extract for desensitization injections which did not help, and did seem to aggravate his symptoms. The Amarillo allergist prepared another extract which has helped alleviate the severity of the allergic symptoms; perhaps this is a factor in the improvement noted during the past nine months.

A food diary kept by his mother very graphically demonstrated that the ingestion of wheat for a week led to increasing fatigue which finally culminated in tension, weakness, vomiting, abdominal cramps and cold sweats. At times the stools have been pale, greasy, bulky, but this of late has been better.

He is tired much of the time, prefers to watch TV most of the day, and rarely plays outdoors. His playmates are usually girls because the more strenuous activities of boys will tire him. At school he usually does not go out on

the playground at recess because of fatigue and brief attention span. His sleep pattern is quite unsatisfactory. After he goes to bed he cannot fall asleep easily and may toss and turn for several hours before falling asleep, and then he wakes easily, often gets in bed with parents. He probably is not getting enough sleep, and this contributes to his fatigue. The mother states, "He is quite insecure and very sensitive and high strung." The mother demonstrates considerable tense anxiety as she relates the history, and she feels great responsibility of caring for this boy and his troubles; all the more because the father travels most of the time and when at home does not spend much time with the boy.

Eating habits are not remarkable. He has had few infections and is not troubled much by colds and minor upper respiratory infections. However, some of these develop into bronchitis and wheezing, but not often.

Past History: [REDACTED] is the product of a normal pregnancy with normal labor and delivery. No difficulty with formula, i.e. no colic, vomiting, diarrhea, loose bowels with mucus or blood; no skin allergy until age of 6 months when hives first were noted.

Family History: There is respiratory allergy in the family.

The family has moved to several different cities during the past 6 years and various doctors have tried diligently to help ascertain the cause of this boy's trouble. Because of the weak spells, helped by food or by sugar enemas, it was suspected that hypoglycemia was a possibility. Glucose tolerance tests done in Denver were reported as normal. At one time the boy had x-ray studies of the upper G.I. tract, and the parents were told he had a gastric ulcer. These films were studied by a Dallas radiologist who considers them entirely normal. [REDACTED] mother met the mother of a boy who was diagnosed here at [REDACTED] as Cystic Fibrosis of the Pancreas, and they decided that possibly Mike has this condition.

From the history, it seems proper to assume that this boy has considerable allergic difficulty, and yet we must search for other conditions which might be a factor. Careful questioning indicates that this boy has no neurologic abnormalities associated with the weak spells, and it seems unlikely that he is having the equivalent of a convulsive disorder or cerebral dysrhythmia. At the time of admitting him to the hospital here the following tests were ordered: CBC and routine urinalysis, glucose tolerance test, epinephrine response test, protein bound iodine level, sweat test, Mantoux test. It was arranged for Dr. Halpern to see the boy in consultation and help unravel the mystery of the "weak spells". We considered doing an EEG but decided to defer this procedure.

Physical Examination: Revealed a quiet, alert, cooperative boy who seemed to enjoy being examined, and was very much at ease during the time he was under observation. Weight 42½ lbs. Height 47 inches. Blood pressure 80/50. He is slender, lean, and his muscles are rather flabby.

Physical examination did not reveal any facts helpful in explaining his complaints.

Laboratory Data: Hgm. 13.3; PCV 41%; WBC 9,400; P-52; L-32; M-6; E-12;
Urinalysis negative.
Glucose tolerance test: 97, 164, 110, 120, 116. All
urines tested during this test were negative.
Epinephrine Tolerance: 110 2 hr. p.c., 106 2 hr. 20 min.
p.c., 135 20 min. after epinephrine, 135 40 min. after
epinephrine, 120 60 min. after epinephrine.
Sweat Test: 13 mEq/litre of chloride
Ca 9.8, PO₄ 5.3, Na 133, Cl 107, K 6, CO₂ 27.3
BUN 14
PBI 8.1 meq%.
X-Rays: G.I. series done elsewhere reported negative.
Chest x-rays elsewhere reported negative.
Mantoux: negative