

icke test not applicable. The fundus examination shows well-marked gray atrophy *right*, with an atrophic scleral ring, vessels of fair size and chorioidal disturbances. The papilla, *left*, is slightly pale but otherwise the papillary area with its vessels is normal. Small, round, whitish chorioidal exudates are sparsely scattered throughout the fundus. The perimeter (Fig. 12) shows in the left eye a well-marked hemiopia."

General Examination.—In my personal examination of the patient nothing further was found except that I was struck with the sausage-shaped fingers which conveyed a feeling of cutaneous resiliency or elasticity such as I have frequently noted in acromegaly. The proportions, however, were not particularly enlarged according to the patient's statement. An x-ray picture (Fig. 13) shows unquestioned enlargement of the sella turcica, which, as is shown in this case, is usually at the expense of the sphenoidal sinus; that is to say, the tendency of the tumor is to advance toward the nasal spaces.

The patient returned to his home in the northwest with the understanding that any further encroachment on the visual field of the left eye would be the signal for an operation.

To these six cases a number could be added in which acromegaly was present. That condition, however, is so self-evident that it is needless to detail instances in this connection. It is much more important that the surgeon, the ophthalmologist and the neurologist should recognize that a pituitary tumor may be present without the association of acromegaly. It is evident from the experience already obtained by the various operators and observers that the removal of the pituitary gland is indicated in both groups of cases. In the first place it furnishes the only possibility of the prevention of blindness, and in the second case seems to hold out some hope of a curative effect for the acromegaly, and in all instances promises the prolongation of life. It is not unlikely that the operation will be fraught with good results in proportion as it is undertaken early.

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FOOD INTOXICATIONS IN CHILDHOOD *

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Much has been written and said about food fevers, autointoxications and similar conditions, but little has been done concerning this class of cases, which, it would seem, ought to be established with comparative definiteness both from the standpoint of diagnosis and treatment; and as a result the patients, both large and small, frequently suffer in the hands of those who do not know what to do for them, or are buffeted about from specialist to specialist for eyes, ears, stomach, or what not. Many a practitioner has been satisfied with telling his patient or his patient's parents that there is some obscure disturbance of metabolism and prescribing various more or less inexact methods of treatment, feeling that because he is unskilled in the chemistry of nutritional disorders he can neither diagnose nor treat them. While one realizes the necessity for the investigation and careful and exact study of the conditions under consideration, there is no reason why, in the absence of such knowledge, the patient should be left to suffer.

A large proportion of the conditions which the pediatrician is called on to treat are due directly or indirectly to errors in diet. Leaving out of consideration a large number of cases in which the trouble is an acute or chronic gastric or intestinal disturbance, there are still a large number in which the mere overfeeding in some direction causes symptoms. These untoward symptoms

may be caused by too much food of all kinds and too little exercise, or by too much fat, protein or carbohydrate, or too much of any combination of these. The symptoms referred to are easily produced in otherwise normal children. There are still other children in whom the maximum limit of fat, protein or carbohydrate consumption is abnormally low, so that what appears to be a more or less correct diet may in any particular child be an unsuitable one, and result in symptoms often not even suggestive of errors in diet. It is well to remember that, on the other hand, disease of some organ may reflexly upset the digestion or metabolism and often unsuccessful attempts are made by regulating the diet to relieve symptoms caused by eyestrain or some other condition.

It is not possible to separate a symptom-complex out of each one of these conditions, although some light has been thrown in this direction, and it is to be hoped that with further study more may come. In other words, the symptoms produced by too much food of all kinds may resemble excessive fat-feeding, or too much protein may cause a condition similar to too much carbohydrate and *vice versa*, so that at times a certain amount of experimenting must be done to determine the proper course of treatment. The symptoms that may be produced are too varied to permit of lengthy description at this time. The most suggestive thing is a train of symptoms recurring periodically; it matters not what combination these may present. The next step in the diagnosis is by careful physical examination to exclude any disease of any organ and, this having been done with greater or less accuracy, a study of the child's habits and food must be undertaken. In over half the cases the error is usually evident; in others it requires careful investigation and often trial diets. These cases require individualizing more than any other class, but the results are often so brilliant as to reward one for the time and trouble taken.

As previously noted, while one can not make symptom-complexes, the following points have been found of use:

Taking of too much food of all kinds usually causes such attacks as are described by the laity as biliousness. The attacks recur with greater or less frequency, and are characterized by fever, a coated tongue, foul breath, headache, malaise, often drowsiness; there is often vomiting or diarrhea or both, and the liver may be somewhat enlarged and tender. A brisk purge and limitation of the diet usually are all that is needed.

Too much protein causes, as a rule, much the same symptoms. Sometimes some one symptom is especially prominent, as recurring headache, or recurring neuralgia, or attacks of vomiting, or in milder cases periods when the tongue is furred and breath foul without much other disturbance.

Too much fat is a frequent cause of trouble, and many children are often intentionally overfed with fat. These are cases of malnutrition in which large quantities of butter, cream, cod-liver oil, and other fats are given with the idea of fattening the child and restoring its normal condition. The result is that the nutrition is not improved, but is usually made worse. The child is unwell, has a pale, muddy skin and large dark circles under the eyes; one of the most striking features is a coated tongue and exceedingly fetid breath. There is gastric disturbance, and vomiting is frequent and there is often diarrhea with the passage of undigested fat in the stools.

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The carbohydrate cases are the commonest of all, owing to the fact that a great many children are given large quantities of starches and sugars, not only at their meals, but between meals in the shape of sweets of various kinds, often of the cheaper varieties of candies. Many children have a very low capacity for utilizing sugar, and some for both sugar and starches. As in the other forms the periodicity of the attacks is the most striking feature. Perhaps the commonest form of the attack is recurrent vomiting, although this may be seen in cases in which protein metabolism is at fault. In some instances the attack consists merely of fever, or a sick headache, while in other cases there are attacks of asthma which sometimes follow indiscretions in diet. The most difficult cases to manage are those in which there is a combination, an inability to utilize normal quantities of protein and carbohydrate, as it is difficult to arrange the diet satisfactorily. The results in preventing the attacks are remarkable if the cooperation of the family can be secured. Having found out the food factor at fault, an effort should be made to determine about what quantity of that particular food can be utilized, then to keep the child on a diet well within the limits of its powers of assimilation. In addition to this it is exceedingly important to see that the bowels are regular, and a rather good plan is to use some fairly active purge at least once a week. Outdoor life and plenty of exercise is exceedingly important and many patients are greatly benefited by a sojourn in the country, not at a summer resort, but on a farm where a very active outdoor life may be led without too much restriction in the matter of observing social forms.

The following cases illustrate what may be done in the different classes of cases:

OVERFEEDING WITH PROTEINS

As an example of protein poisoning the instance of a small child $2\frac{1}{2}$ years of age may be cited; an only child and one very badly brought up, who had an idea in its head that it would eat nothing except meat, or very little else. The child was having periodic attacks of an illness consisting chiefly of fever and prostration, the attacks being rather promptly relieved by the administration of calomel. In addition the child was having repeated seizures, almost epileptic in character, which would come on if the child became angry, or sometimes without any warning whatever. The child was put first on a milk diet and from that on an ordinary normal diet, making a complete recovery and has remained well ever since.

OVERFEEDING WITH FATS

An example of the cases of overfeeding with fats is shown in the case of a boy 6 years old who was very much undersized and under the normal weight, who had never been robust since an attack of ileocolitis in infancy. His mother, being anxious to make him a large, strong boy, under the advice of her physicians, gave him large quantities of cream, yolk of egg, cod-liver oil, and overfed him in other directions as well. The result was considerable gastric and intestinal disturbance, and a typical picture as described above from overfeeding with fat. The attacks of this character had been recurring for years. The diet of the boy was entirely readjusted, he was taken out of doors, and made a very good recovery. He gained in weight and strength, and the periodic attacks ceased altogether with the change in diet.

OVERFEEDING WITH CARBOHYDRATE

The carbohydrate cases present many different features. The following illustrate some of these points:

Recurrent Vomiting.—A boy aged 5 had been having attacks of vomiting, for several years, lasting four or five days at irregular intervals varying from a few days to a few weeks. These attacks began after an attack of some sort of a diarrhea when he was a small infant. Numerous physicians were consulted and the diagnosis of gastric disturbance was made in every instance, and the boy's diet arranged with that disease in view. He was finally taken to New York, where the diagnosis was confirmed, and finally on his way through Baltimore to his home in the south he was taken with a severe attack. The mother decided not to consult any physician, but, the boy's condition becoming alarming, she feared that the attack would prove fatal and sought aid. The diagnosis of cyclic vomiting was made; the boy was put on a diet without sugar and one containing comparatively little starch, and in the past three years he has improved in every way. He has had only one or two attacks of vomiting and these followed overindulgence in sweets.

Recurrent Fever with Diarrhea.—A small girl, aged 3, who was given excessive quantities of starchy foods and candies, was having attacks of fever with diarrhea coming on every other day. The diagnosis of malaria had been made, but there were no parasites in the blood and quinin had no effect. The case was seen in consultation and the suggestion made to cut out the sugars and limit the starchy foods. The child made a rapid recovery, and has had practically no recurrences of the trouble except on overindulgence in sugars.

Asthma.—The first case was one of an infant who had severe eczema and also frequent attacks of asthma. The child had a severe intestinal disorder, and was living on cereal gruels and fruit. The child refused to take milk or milk mixtures, and finally after considerable difficulty he was put back on a normal diet with the result that the eczema became very much better, but the asthma persisted. The amount of sugar and starch in the diet was limited, and under this diet, as long as the child was out of doors and getting plenty of exercise, he remained free from asthmatic attacks.

A second case is more striking. A girl of 13 was having recurrent attacks of asthma for which she had been treated in many different ways, having had her tonsils removed and her nose operated on without any result. The attacks were more or less periodic, and during them the urine contained acetone and diacetic acid. A trial was made of cutting out the sugars and limiting the starchy foods, with the result that the child has only had two attacks in the past year, both of these following overindulgence in sweets at a children's party.

Recurrent Fever.—A boy of 8 was having recurrent attacks of fever so that he was ill about one-third of the time. The urine contained no diacetic acid during these attacks, and beyond the symptoms caused by the fever nothing could be discovered. With the same dietary precautions and free purgation once a week the boy has been entirely free of these attacks with exception of one shortly after the treatment was instituted.

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Saline Transfusion to Arrest Hemorrhage.—The coagulating power of the blood is said to increase materially after injection of 5 or 10 c.c. of a 3 or 5 per cent. solution of salt. Van den Velden has announced the hemostatic value of small amounts of a hypertonic saline fluid, and their harmlessness.