

regard to the cat except feed him normally, he will usually sooner or later get well. If you feed these cats upon alkalinized food, they will certainly get well. Under the microscope you see the various microscopic changes that take place, of different degrees of penetration and infiltration of these ulcers in the gastric wall. You can well control this by the diet which you give the animal.

Now, then, we have got to look at these gastric ulcers, not as permanent, but as things that come and go. A patient may have something we do not know anything about which predisposes him to ulceration of the stomach or duodenum, and when he has this anaphylactic reaction, and is in a condition to be sensitized to certain substances, he will have an ulcer as people have ulcers in the mouth. These ulcers heal of themselves. If you touch them with nitrate of silver, they will heal quicker, and the patient is all right for a few weeks, a few months, or years; yet these patients come back to you, sooner or later, with a recurrence of the ulcerative stomatitis. Exactly the same thing happens in the stomach. The patient may have an ulcer, the ulcer gets well, and within a few weeks, a few months, or a few years the ulceration comes back, depending upon the general deportment of that patient, and I fully believe that the manner of diet, the amount of rest and exercise has a great deal of influence upon the condition of the general bodily health.

I want to agree with Dr. Roberts in saying it is not always easy to differentiate gall-stones from duodenal ulcer or gastric ulcer. I myself made a diagnosis once of gastric ulcer on account of symptoms of pain coming on whenever the stomach was empty. It was relieved by taking alkalinized food. One could relieve the pain daily by giving a teaspoonful of bicarbonate of soda in a glass of water. But this patient had a sudden crisis; I thought a perforation. The surgeon operated and removed a tablespoonful of stones about the size of green peas. It was gall-stones and not ulcer. I was much surprised, and yet that mistake is often made. You can not always make a correct diagnosis in these cases, but as a rule the symptoms are very clear.

I think the Sippy treatment is excellent, and it is the best thing so far as alkalinization is concerned, but we find a great many people who have anaphylaxis for milk, or who can not take milk, because it will curdle in large lumps, and they do not tolerate it very well.

Dr. Friedenwald (closing).—The difficulties encountered in the diagnosis of peptic ulcer are well recognized, though I do believe that with care the diagnosis can be correctly made in a fair proportion of cases. The fact that ulcers are frequently not confirmed by operation, however, does not always indicate that they do not exist. There is a large group of so-called mucous ulcers which are not indurated that can only be recognized by opening the stomach itself. In two instances in our experience patients were operated upon for ulcer in whom this condition was not revealed. They were subsequently operated upon after having had large hemorrhages

and at the second operation the diagnosis of ulcer was confirmed. Ulcerations of this character are not to be considered as surgical, but purely medical, and are best treated by the Sippy method.

We still maintain from our experience, extending over a number of years, that the therapeutic test, that is, relief from symptoms as soon as the patient has been placed upon treatment in patients affected with symptoms of ulcer, is of some value in diagnosis, and when these are not promptly relieved under these conditions, we must bear in mind the possibility of an incorrect diagnosis. The 86 per cent. of cures refers merely to the immediate results of treatment; the end results present but 72 per cent. of cures. The transition of gastric ulcer into carcinoma occurs, according to our experience, in less than 23 per cent. of cases. This has now been confirmed by a number of clinicians, though the surgeons give higher percentages.

In conclusion I wish to draw attention to the fact that the etiology of ulcerations of the stomach and duodenum is as yet far from settled and that even surgery does not afford permanent cure in all instances of this disease. While we recognize the importance of surgical intervention whenever such a procedure is indicated, we believe that there are many instances in which ulcerations are amenable to medical treatment, and according to our experience the most satisfactory results of medical treatment may be obtained by means of the "Sippy Cure."

THE PROGNOSIS OF GENERAL PARALYSIS OF THE INSANE

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The responsibility of a physician treating a case of paresis does not end with the making of a diagnosis and the giving of an unfavorable prognosis. The family is entitled to know as much of the course of the disease as possible in order to safeguard their own, as well as the patient's interests. They should be informed that he is suffering from a chronic, dementing disease, of which the consensus of opinion is that it is incurable. Special stress should be laid on the fact that it is from the first a dementing process. From the time the diagnosis is made until his death he should have a guardian for his person, and no matter how apparently good his

mental condition, important matters, especially financial, should not be entrusted to him. Providing his wife is sufficiently intelligent and co-operative to make use of the information, she should be informed as to the etiology of the disease in order that she can take steps to have her own and her children's condition looked into.

Paresis being a disease of known etiology and pathology, it is possible that some exact laboratory method of determining the location and extent of the process during life may be developed, and thus permit us to make a more accurate statement as to the prognosis. Failing in this, we are forced to depend on what experience has taught us concerning the disease in its various manifestations. The average length of life from the time the mental symptoms become noticeable is usually given as two to two and a half years. The limits are very wide, from a few weeks to ten, fifteen or more years, so that an average of the whole number is of little value from a prognostic standpoint.

The factors to be considered in giving a prognosis are, aside from existing organic conditions, the age of onset and form of the disease, the occurrence of special episodes and the serological findings.

AGE OF ONSET

An individual of any age who is infected with the spirochete may develop paresis. It occurs typically between the ages of 35 and 45, because the proper interval has then elapsed since an infection is most likely to have been acquired. Congenital lues, or an infection in infancy or early life, may result in the type known as juvenile paresis. This disease usually appears at the age of 12 or 15, is most often of the dementing type, and runs a very irregular course. If convulsions occur, as they often do, the disease is hastened. Paresis occurring in the aged is likely to run a rapid course, and to be of the depressed rather than the expansive type.

FORM OF THE DISEASE

There are four principal forms of paresis. The determination of the type is of importance prognostically because the different types run a quite different clinical course. The disease may start out as one form and eventually assume the

aspect of some other form, but as a rule when once established the tendency is to run the course of that particular type.

The demented type forms over half of the cases of paresis. It is apt to occur in younger individuals. Kraepelin says that 44 % die within two years. It is especially in this type that convulsive attacks are frequent and remissions infrequent. The progress is steadily downward with often a more rapid dementing after attacks.

The depressed type occurs in older persons. Convulsions are not so frequent as in the demented type, but it runs a more rapid course, 59 % dying within the first two years. This type comprises about one-sixth of the cases of paresis.

The expansive type is more likely to run a long course, only 40 % dying within two years. It is more apt to occur in older persons. Convulsive attacks are not the rule. It is these cases that are likely to run a long fluctuating course, retaining their activity for many years and having often a number of remissions of symptoms during which they may be apparently normal mentally. This type comprises about one-fourth of the cases of paresis.

The agitated type, the least common, forming about one-twelfth of the whole number of cases of paresis, as a whole runs the most rapid course. The average duration of life in men is given by Kraepelin as sixteen months, and in women considerably less. Two-thirds die within two years, but as seizures are infrequent and some cases show a tendency to remit and run a long course, the probable duration of life is uncertain. It is this type of case especially that often becomes quickly exhausted and dies within a few weeks.

From the above it can be said that the expansive type offers the best prognosis, the demented type (especially if convulsive attacks are infrequent) the next, and the depressed and agitated types die the most quickly.

INFLUENCE OF SPECIAL EPISODES

As detailed above, seizures of various sorts occur more or less commonly in the various types of paresis. These seizures may be of the epileptiform variety, generalized convulsive attacks not followed by paralysis, which may be so frequently repeated as to constitute a status. Death

may occur at this time, or as often quite unaccountably happens, the patient may rally after his life is despaired of. Following these attacks he is likely to be more demented and their frequent occurrence has distinctly an unfavorable prognostic import. Apoplectiform attacks cause a more or less extensive paralysis, which may be permanent or may clear up quickly, leaving insignificant residua. It should be remembered also with these that the prognosis is less favorable, but that they often unexpectedly recover from the stroke with little or no permanent paralysis.

Remissions are more frequent in the expansive and agitated types, less so in the depressed, and seldom ever occur in the demented. In paresis as a whole, definite remissions occur in from 10 to 16 % of cases. Of the expansive cases, one-third remit, often repeatedly, so that the course may be stretched out over many years. Remissions may begin quite abruptly, but usually there is a gradual disappearance of the extravagant ideas and the development of some insight, but a persistence of the physical signs and spinal fluid changes. Improvement may be so nearly complete as to permit of his returning to work, and to be considered by his family and associates as recovered, but the symptoms eventually return, usually after a few months, or at most a few years, the average being about six months. Kraepelin says that remissions of more than two or three years must be regarded as exceptions, but instances have been reported of remissions lasting five or six, or even more years, one being mentioned by Kraepelin as lasting fourteen. However long the interval and complete the absence of mental symptoms, the patient's acts should be carefully supervised, for the underlying defect is still present and may lead him into grave financial or other error.

SPINAL FLUID CHANGES

The value of the spinal fluid findings in estimating the course of a paresis is not as great as might be supposed. It can be said in a general way that a high cell count and a large amount of globulin indicate a rapid process. The gold curve fails to be of help in this regard. The spinal fluid Wassermann is always posi-

tive in paresis, but the degree of positiveness is not an indication of the length of the disease. In like manner, the blood Wassermann, while of great help diagnostically, is valueless from a prognostic standpoint since paretics with negative blood do not live longer than those with a positive blood. On the other hand, a negative blood is more likely to be found in a well advanced paresis than in a recent one.

INFLUENCE OF THERAPY

Much space has, within recent years, been consumed in discussing the value of arsphenamin intravenously and intraspinally and of the various forms of mercurial treatment in paresis. The more conservative of the exponents of active treatment claim an increased frequency of remissions and improvement of focal lesions. The weight of opinion seems to be that antisyphilitic treatment does not cure paresis, nor does it cause remissions. but on the contrary, intensive treatment may cause a more rapid deterioration, an arsenical neuritis, etc. Hospital care, by regulating the life of the individual, results in a prolongation of life and he should, except during remissions, be confined in an insane hospital.

TERMINATION

The final outcome in all cases of general paralysis, unless death results from some intercurrent disease, is the same. The patient becomes progressively more demented and weaker until he is bed-ridden. He is very untidy and quite helpless. He is so nearly mindless that he is unaffected by his surroundings, but he may until the last retain residuals of his elated or depressive ideas. Death as a result of this gradual failure is the natural termination of the disease, but it may be caused abruptly by an epileptiform or apoplectiform attack, or it may be due to an infection. Pneumonia is the most frequent form of terminal infection, but pus infections in the form of large abscesses, septicemia, erysipelas, bed sores or cystitis frequently hasten the final result.

SUMMARY

In giving a prognosis in a case of paresis, the family should be informed as to the probable course of the disease, as well as to its final fatal termination.

The making of a prognosis requires a consideration of the age of onset, form of the disease, the influence of special episodes, the spinal fluid findings, and the influence of treatment.

While the duration and course may vary in the different types, the final outcome is the same in all cases.
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ACUTE INFECTIONS OF CHILDHOOD*

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It might seem a physical impossibility to discuss the acute infections of childhood in a single paper, but there are certain general principles and points of contact which are exhibited by them and these can readily be considered briefly. While children have many of the diseases of adults and we find the converse equally true, yet there are certain diseases which are confined almost entirely to childhood, and some of these are rather hastily dismissed under the category of "the diseases of childhood." Most people and many physicians, too, consider these ailments as mere trifles unworthy of serious consideration. To a busy physician in general practice, possibly straight from a tedious hysterectomy, naturally a slight bronchitis and conjunctivitis, perhaps the onset of measles is not especially interesting. And yet what a difference a day may make to other children.

During the past few years the child welfare movement has undoubtedly made great strides. Society's whole attitude has changed. Most people no longer regard children as little nuisances. The average mother today is interested in feeding her child properly, even though frequently her notions are wide of the mark. Furthermore, she shuns any exposure to tuberculosis, goes far from infantile paralysis and shudders at hearing of any disease or condition with a new name, such as acidosis. But the time has not yet come when

she realizes that the commonest children's diseases in reality take the greatest toll.

Again and again we find people who insist that measles and whooping-cough do not amount to anything. Nevertheless, during 1916 in the registration area of the United States there were 7,947 deaths from measles and 7,284 from whooping-cough. You may say we know all this. Yes, you do, but the man on the street who has children to be protected does not. And because of his ignorance the child mortality is unnecessarily high. Not that we can give any sure way of escape, but since the diseases can be postponed for several years, this should be our endeavor. All statistics prove that the highest mortality is before the fourth year, at least in measles and whooping-cough. There are many diseases which, while they are common in childhood, apparently differ widely as to symptoms and signs. However, there are several which because of their extreme contagiousness and their almost constant presence, may well be considered together. Measles is certainly very different from whooping-cough and yet broncho-pneumonia is the commonest cause of death in both. Scarlet fever with its punctiform erythema off-hand would not be confused with diphtheria, but both are characterized by a sore throat.

Let us take stock, as it were, of our knowledge of measles, whooping cough, scarlet and diphtheria. Notwithstanding some recent excellent work, the causative factor of measles has not been found. Until it is, we shall have to postpone the solution of many of its problems. But clinically the diagnosis is easily made before the rash. This early diagnosis is most important for the safety of others. One great field here would seem to lie in the education of the people first that measles is most contagious before the eruption and that it is a very serious disease, especially in early childhood. The most important points in the management of the case is close attention to ears, mouth and lungs. In general, measles is very badly treated by the practitioner. Aside from a cough mixture and drops for the eyes, he does nothing that the grandmother could not do. It is a reproach to medicine or the modern conception of the doctor's function that many individuals

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