to find a web of remote causes extending back into the childhood of the patient, and it is reasonable to suppose that, if these causes had been disentangled and remedied during the actual period of childhood, the later psychoneurosis could not have subsequently developed. The great importance of the early years of childhood as the phase in which the ultimate fortunes of the individual are rigidly determined has been emphasized by many otherwise completely divergent schools of thought. The Fathers of Port Royal are reported to have said that if they had a child for the first six years of its life they did not care who taught him later. The psycho-analytical school believe that the essential structure of the mind is fashioned in the first few years of life, and that later psychoneuroses can only grow in soil which has been specially prepared in that early period. The behaviourists, again, with their view of the infantile mind as something like a *tabula rasa* except for a limited number of reflexes capable of endless variations by the "conditioning" which occurs in early life, must necessarily attach fundamental importance to the management of childhood. It would appear, therefore, that the child guidance clinic can play a great part in remedying minor disturbances in childhood which may, if left untreated, pave the way for all kinds of more serious conditions in later years, and particularly for the whole range of the psychoneuroses.

We do not know how far a similar prophylactic function may apply to the later development of actual psychoses. Even here, however, there are indications of a possible line of attack. Considerable evidence has accumulated in recent years for the view that certain psychoses, manic-depressive and schizophrenic, are only likely to develop in certain types of individual, and that the recognition of the type in the normal person will enable us to predict the variety of psychosis which is liable to develop, though this development is of course by no means inevitable. If this relationship can be established there would appear to be ground for hoping that careful and adapted management of a child in whom the characters of a particular type were prominent might lessen the chance of the corresponding psychosis developing in later life. For example, the boy of marked "introvert" type—seclusive, tending to live in himself, and unable to adapt easily to social relationships—might be trained to modify these reactions in some measure, and hence to avert the risk of a later schizophrenic development.

So much for the services which the child guidance clinic may perform, some of them solid and of unquestionable value, others much more hypothetical and only to be regarded as hopeful avenues for exploration. Let us now consider the criticisms which may be levelled against the clinic as a part of our practical medical armoury. The first obvious objection is that the employment of a team of workers, each investigating the patient from a particular angle, involves the loss of that close clinical and personal touch which characterizes the work of every good physician. It is true that the method of holding frequent conferences between the members of the team goes some way to obviate this criticism, but it is nevertheless valid enough, and the physician with time and opportunity will probably prefer to dispense with a social worker, if not with a psychologist, and to do their share of the work himself. This is indeed likely to be necessary when dealing with patients of certain classes, because the employment of a social worker would be impracticable except in very limited ways. For great numbers of patients, however, and particularly for those whose only alternative centre of treatment would be a hospital out-patient department, the objection is irrelevant, because no other adequate scheme is possible. Whether or not the individual is better than the team method is not of great moment when only an absolutely ineffective indi-

vidual attack is feasible. We may admit the disadvantages of the team approach, but clearly these are outweighed by the advantages.

The second and most formidable criticism concerns the costliness of the child guidance clinic. In view of the amount of time and labour involved in each case the cost per patient is undoubtedly very high, and unless the expenses can be cut down it is difficult to see how a wide extension of child guidance work will be possible. By skilful organization, however, particularly the classification of cases by the psychiatrist, so that the whole machinery of the clinic is only brought into play where it is needed, considerable economies in time and effort can be effected, and hence the total cost of working greatly reduced. At the best, however, the method will remain an expensive one, and there are some who believe that the chief value of the clinic will ultimately be, not the services it renders to the individual child, but the training of workers and investigators who will carry a trained understanding to schools, courts, and other places where it will prove capable of fertile employment.

Other criticisms are levelled at the method of treatment in itself, mainly on the ground that it does not conform to the method which the objector believes to be the only valid approach. Criticisms of this kind may come from several quarters, and are clearly mutually destructive. The principle firmly maintained by most of the child guidance clinics in America and in this country, and which I believe to be fundamentally sound, is that in this work a catholic point of view, with the avoidance of a narrow adherence to the doctrine of any particular school, is absolutely necessary. We must be prepared to view each case from the widest possible angle, to consider that all kinds of factors may be playing a part, and to do our best to modify those factors which seem to be contributing to the undesirable situation by any and every means which presents itself to our hand. This is the attitude of the child guidance clinic, and it would appear to offer a line of attack which cannot fail to be fruitful.

THE DIABETIC ACUTE ABDOMEN A TYPICAL CASE

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It is well recognized that severe ketosis and acidosis in the diabetic may be associated with digestive disturbances, such as nausea, vomiting, constipation, and colic; but little attention, if any, has been drawn in this country to the violent and puzzling abdominal pains that may occur, although a few cases have been recorded in America^{1 2 3}. In such a case the signs and symptoms in the abdomen may simulate so closely those of an acute abdominal catastrophe that surgical intervention has been needlessly undertaken. The differential diagnosis was especially difficult in the case we are recording, in which a high polymorphonuclear leucocytosis was present.

HISTORY OF THE CASE

The patient, a robust man of 31, was known to have had fairly severe diabetes since 1924. He was investigated in this hospital in 1928, and went home taking 40 units of insulin twice a day and a liberal qualitative diet. He kept

quite well until March 14th, 1931, when he was brought up to the casualty department in a marked hypoglycaemic attack (produced by an unusual amount of exercise) in which he almost lost consciousness. He responded quickly to glucose treatment, and, feeling fit, discharged himself on Monday, March 16th. His bowels, which were usually quite regular, were not opened on Monday or Tuesday. On Monday afternoon he felt rather drowsy and went to bed, and took no food or insulin for the rest of the day. He had a poor night and vomited four times. On Tuesday morning he again felt drowsy and had some nausea, so he stayed in bed and took no insulin. At 1 p.m. he had a sudden attack of very severe generalized abdominal pain, which was especially severe round the umbilicus. The pain was very intense and quite continuous. At 4 p.m. the patient was seen in the casualty department. He was rolling in agony on the couch, clasp his knees and calling out for morphine. His temperature was 97.6°, pulse rate 136, and respiration rate 36. All his abdominal muscles were absolutely rigid, and the abdomen was if anything, retracted. Pressure made the pain worse, and it seemed to be aggravated on inspiration. The lower intercostal muscles on both sides were in spasm. The urine contained a fair amount of sugar (about 1 per cent.) and a large amount of acetone bodies, although the ferric chloride test was negative. The patient was not drowsy and had no signs of approaching coma. Both knee-jerks and ankle-jerks were absent.

DIFFERENTIAL DIAGNOSIS

Four possible diagnoses were suggested. First, severe and acute diaphragmatic pleurisy; secondly, a tabetic gastric crisis; thirdly, an acute abdominal catastrophe such as a perforated gastric ulcer; and, later, the rare condition of severe diabetic "colic." The character of the pain, the spasm of the intercostals, and the rather rapid respirations were in favour of pleurisy; but there was no cough, no friction was heard, and the temperature was subnormal. The absence of knee and ankle jerks and the severity of the pain naturally made one think of tabetic crisis, but there were no other signs of syphilis; the Wassermann was found later to be negative. Two alternatives remained—the true acute abdomen and the diabetic acute abdomen; the differential diagnosis between the two seemed impossible. There was no history of previous indigestion, and the patient was not in the least drowsy; in fact, there were no signs of approaching coma.

FURTHER HISTORY OF THE CASE

At 5 p.m. on Tuesday, March 17th, the patient was given 1/4 grain of morphine, and at 6.45 p.m. 60 units of insulin; it was decided to await further developments. At 7 p.m. the picture had completely changed. The patient was rapidly becoming collapsed, the pulse rate was 150, there was marked drowsiness and air-hunger. The eye tension was much lower, the tongue was raw and dry, the urine contained more acetone—a remarkably quick change in two hours. The abdomen was as before, and it was noticed that there was more tenderness on the right side than on the left. An enema was given with a fair result.

At 9.30 p.m. the blood sugar was found to be 0.644 per cent. At 10.30 p.m. it was 0.580 per cent. A leucocyte count at 10.30 p.m. showed 51,000 total leucocytes; 93.6 per cent. were polymorphonuclears, including many metamyelocytes; 6.4 per cent. were lymphocytes. The pulse rate was still 150, and the abdomen as before. It was then decided to operate if the pulse became any worse.

More insulin (60 units) and glucose (20 grams) were given at midnight, when the pulse rate was 130 and the patient a little more comfortable. At 6 a.m. the following morning the pulse was 118 and much stronger. The abdomen was still tender (although the pain had gone), and still a little rigid. A blood count at 10 a.m. showed 26,600 leucocytes, 91.2 per cent. of which were polymorphonuclears. The blood sugar was 0.184 per cent. and the patient was better in every way. The diagnosis of uncomplicated diabetic acute abdomen was then assured; the patient rapidly improved and was discharged fit three days later.

The subsequent behaviour of the blood cells is shown in the following table:

Date	Time	Red blood cells in millions	Haemoglobin. Per cent.	Total leucocytes	Polymorphonuclears. Per cent.
March 17th	10 p.m.	6.0	112	51,000	93.6*
" 18th	10 a.m.	6.3	112	26,000	91.2
" 18th	10 p.m.	6.1	120	18,400	87.6
" 19th	10 a.m.	5.9	120	10,800	79.6
" 20th	10 p.m.	6.3	122	9,000	71.6
May 14th	8 weeks later	5.7	124	9,000	81.0

* Including many metamyelocytes.

DISCUSSION

At one time the diagnosis and the advisability of operation were matters of extreme doubt. Even later, when the increasing ketosis and impending coma made the diabetic condition the probable cause, it was difficult to be sure that some acute surgical condition was not also present. Had we not known that a high leucocytosis may be present without any septic focus, the high count would have demanded immediate operation. The decision was made to operate if the pulse became worse, and if the diminution of the ketosis by the insulin did not relieve the pain and abolish the rigidity. Both pain and rigidity, however, rapidly diminished as the insulin took effect, and the man's general condition at once improved.

It should be stated that this clinical syndrome of intense abdominal pain, tenderness, and rigidity is very rare in severe ketosis and even in impending coma, although some sickness and moderate colic is common enough. We can make no serious suggestion as to the cause of the syndrome or of the accompanying leucocytosis.

SUMMARY

An extreme case of the acute abdominal condition occasionally associated with severe diabetic ketosis is reported. Intense abdominal pain, tenderness, and rigidity, and a high leucocytosis were present, simulating an acute abdominal condition. All the acute symptoms disappeared within twelve hours of adequate insulin treatment.

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ELECTRICAL TREATMENT OF NEURITIS AND WRITER'S CRAMP*

BY

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The treatment of neuritis by electricity was advocated by the late Dr. Naunton Davies some thirty years ago. He published his results in the *Bristol Medico-Chirurgical Journal* in June, 1915, stating that the method was applicable only to interstitial neuritis in which there is hyperaemia and exudation in the nerve sheath. The diseased areas are limited in extent, the spots are often the size of a split pea, or smaller, the nerve between them being free from trouble. If a spot is overlooked, pain may remain in that spot, and radiate over a wide field.

* A paper read before the Cardiff Medical Society, April 14th, 1931.