

Temporary Mental Confusion in the African

BY

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The term "temporary mental confusion" denotes a state of mental imbalance which clears with or without treatment after a relatively short interval of time, when the patient is restored to normal. Lambo (1960), of West Africa, refers to it as *Periodic African Psychosis*, although it is difficult to be certain whether we are referring to the same condition. It is characterised by agitation and excitement, the whole attack being transient and over after several or more days. During the attack the subject may injure himself or others and be a threat to life and property. There are a number of well-recognised diseases which have an organic basis and which can produce a similar state. In a medical ward one commonly encounters these cases and it was the object of this study to classify them and determine their frequency.

Each consecutive patient admitted to my male wards with mental confusion, or who developed it after admission, was studied. As a rule the recognition of a mental disorder is fairly easy, for not only is the doctor likely to spot it, but as soon as a patient shows any departure from normal the sister or nursing orderlies soon realise this and the fact is reported. I admit, however, that a number of milder forms of the disorder may be overlooked. A series of investigations was instituted unless the diagnosis was so obvious that it was deemed to be unnecessary.

As so many diverse and different diseases cause "mental disorder," it follows that a careful clinical examination had to be carried out on each patient. However, as a general rule special attention was paid for signs of malnutrition, especially pellagra. The presence or absence of fever was observed and, if present care was taken, to examine for signs of meningitis and malaria. An injury to the head is liable to be overlooked in the absence of any

suggestive history, and in most cases an X-ray of the skull was taken unless the cause of the mental disturbance was obvious. The tongue often shows signs of having been bitten during a fit—a useful indication as to the cause of the mental aberration in this common disorder in the African. Renal disease was always remembered, the blood pressure being determined in all cases and urine examined both chemically and microscopically. The blood urea estimation was requested when indicated. In view of the importance of syphilis as a cause of nervous disease in the African, a Wassermann reaction of the blood was determined on most of the cases.

RESULTS

In all, 95 cases were collected. They were admitted with mental confusion or developed confusion in the wards after admission. The term confusion implies an inability of the subject to appreciate where he is, who he is and whose speech is incoherent. In addition, he may be agitated, restless, stuporose and depressed.

The 95 cases were classified as follows:

Cause not obvious (idiopathic temporary mental confusion)	28
Nutritional	19
Toxic	15
Febrile	11
Epilepsy	8
Hepatic encephalopathy	6
Cerebral	4
Uraemic	4
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	95
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Idiopathic Temporary Mental Confusion

Perhaps this is the most fascinating condition. Time may well disclose that there is a specific agent or agents responsible for this form of temporary mental confusion. It might be that we have been overlooking some other well-recognised state. Psychological investigations, for instance, may show that this is probably now more than a form of fugue or an escape mechanism from immediate problems.

The clinical features vary from a depressive or stuporose state to one of agitation or violence, the most usual form being a simple confusional state in which the patient shows little emotional disturbance, but his ideas are confused and he has no sense of person, time and place. Some resemble closely a schizoid state. It is possible that some of those cases characterised by hallucinations suffered from

acute alcoholic hallucinosis, which is characterised, however, by hallucinations expressed in the third person, whereas in schizophrenia these are in the second person. The prognosis as to recovery or regaining of the patient's sanity is good, for recovery is to be expected, although relapses may set in at some future date.

Of the present series (28), the following forms of idiopathic T.M.C. were found, these being based largely on the behaviour pattern of the subjects:

Type of Idiopathic T.M.C.	No. of Series
Agitated, aggressive or violent	8
Simple confused type	5
Depressed type	4
Stuporose or comatose type	5
Katatonic type	3
Hallucinatory type	3
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	28
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All the patients lived in an urban area at the time they became confused, although one is not sure how long many of them had lived in this environment before developing the disorder. In 16 of the patients there was clear mention that they hailed from an urban area, but of these 16 only one spoke a good English and, including this one, three had worked some years in an urban area, whereas the others (13) were more traditional or rural in outlook, having been in contact with urban living conditions for a relatively short period.

The diagnosis of idiopathic T.M.C. was made after first excluding all other causes of mental confusion. Therefore a careful examination had to be carried out for evidence of organic disease which might account for the mental disturbance. As some of these cases resemble schizophrenia, a number are diagnosed as being schizophrenics—probably a far greater percentage than is realised (Smarrt; personal communication). According to Smarrt, idiopathic temporary mental confusion is one of the most common mental disorders he is called upon to treat in Salisbury. The response to electroconvulsive therapy is usually excellent, but tranquillisers are also of great help where this form of treatment is not possible. For the agitated type he recommends Melleril.

Nutritional Group

This constituted the second largest group, there being 19 cases. Diagnosis of the cases was generally easy, as most of them presented with the classical features of pellagra, especially

with the characteristic dermatosis, and in many there was an associated diarrhoea.

Of the 19 cases, 14 conformed to the classical type of pellagra. The other five cases, although they could not be described as having pellagra, displayed features so striking as to make one consider that a nutritional basis was the most likely reason for the mental disturbance. For instance, one patient had marked follicular seborrhoea of the face and diarrhoea, three had a dry, unhealthy and scaly rash of the limbs with a cheilitis, and the fifth a scrotal eczema.

Toxic Group

This group was also common and accounted for 15 cases. But it was not easy to define this group. In some, where Nilodin (lucanthon hydrochloride) tablets were taken, it was easy to label them as belonging to the toxic group. It was difficult, however, where enteritis was the cause, for in many no fever or only a slight pyrexia was present. Therefore I decided to include these cases in the toxic group. In some of them the mental disorder may be related to a renal effect. The toxic causes are summarised in Table I.

Table I

“TOXIC” CAUSES OF MENTAL CONFUSION
IN FIFTEEN PATIENTS

Nilodin reaction	4
Gastroenteritis	4
Spontaneous hypoglycaemia	2
Lightning burns	1
Dagga poisoning	1
African medicines	1
Delirium tremens	1
Acute alcoholic hallucinosis	1
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The possibility that a spontaneous form of hypoglycaemia, induced at times but not always by acute alcoholic intoxication, should be remembered when one is called upon to treat an African admitted with mental confusion or in coma. The diagnosis is made by blood sugar estimation and by the rapid response of the disorder to glucose administration.

It could be argued that the cases of gastroenteritis might have been better included with the febrile group, but as the fever was not the striking feature of these cases, I preferred to group them under this category. The diagnosis in these cases is not difficult, as in most of

them the history and the physical examination are the more striking part of the clinical picture.

Febrile Group

In this group the diagnosis was much more easily established, as the fever in each patient was high and there was little doubt that the mental impairment followed because of the febrile disorder. There were 10 cases in this group. Two had malaria, three lobar pneumonia and one acute appendicitis; in the remaining three the cause of the fever could not be determined.

Epilepsy

Eight patients developed mental confusion following a fit. On the whole this group presented no difficulty in diagnosis. There was often a history of the patient having had a fit prior to being admitted to hospital. On the other hand, difficulty may be experienced in recognising the true nature of the mental disturbance if there is no such history, but remembering to examine the tongue for signs of injury proved to be a most helpful corroborative sign that a seizure had occurred.

Hepatic Encephalopathy

Six patients were found to be mentally disordered because of liver failure caused by cirrhosis. This did not include three cases who were comatose or passing into a comatose state from hepatic disease. It is important that the nature of the confusion be recognised early, since much can be done to restore the patient to his normal senses once again, although clearly one cannot cope with the primary and underlying disorders of cirrhosis. Many of these patients can be saved to-day by administering treatment which is so often effective that patients recover and leave hospital much improved.

The clinical features of hepatic encephalopathy can resemble many other psychiatric disturbances. Some are simply confused; others are agitated and restless or even become violent and have to be restrained. These cases in particular pose a difficult problem for their correct management, for the sedative drugs administered may adversely affect the patient. Others again are more depressed and quiet, as well as confused. The point I wish to stress, however, is that any mentally disordered African may have underlying liver disease and so the clinician must carefully examine a mentally confused patient for hepatic and splenic enlargement, ascites, enlarged abdominal veins and

jaundice. The clinical signs of hepatic encephalopathy may be minimal. For instance, the liver may not be palpable, but any enlargement of the spleen should suggest the possibility of portal hypertension. A very useful finding in doubtful cases is a reduction of the A/G ratio. This estimation is of great help in cases which were difficult to assess. Admittedly it is difficult to be certain that the patient would not in any case have recovered without treatment.

Uraemia

Chronic uraemia is one of the more frequent disorders seen in the medical wards, and its manifestations are legion. Some develop coma, others bleeding gums or acidotic breathing, and others again convulsions or persistent vomiting, but from time to time the patient is admitted in a confusional state. The blood urea is always raised, often to a very high level. The urine contains albumin, perhaps blood and casts, but as these may be found in urinary bilharzial infections their presence is not always easy to assess. The blood pressure may be elevated, but not infrequently this is not altered. Typical retinal changes, which include haemorrhages and exudates, would also provide valuable evidence that the mental derangement is the consequence of renal disease. However, this is not an easy examination to conduct on a patient who is often restless and moves his eyes continually.

Cerebral Causes

In the cerebral group there were four cases and included one case each of subdural haematoma, syphilitic meningitis, concussion and cerebral thrombosis. This group is readily recognised by the special features which point to cerebral involvement.

The Complicated Type

No clinical description of any material in Africa would be complete without referring to those cases which show a mixture of types of mental confusion; and whereas I described only five types, there were a number where it was not easy to be certain, as another cause generally was found in the same case. In such an event I placed the case under that group where I thought the major factor lay. For instance, if a mentally confused subject had hepatic disease with a relatively minor pellagroid rash, he was placed in the hepatic group. There were 11 such complicated cases.

Table II

COMPLICATED TYPE OF MENTAL CONFUSION IN WHICH MORE THAN ONE CAUSE WAS FOUND

Major.	Minor.
Hepatic cirrhosis.	Pellagroid.
Temporary mental confusion.	Blood W.R. ++
Temporary mental confusion.	Hypertension.
Epilepsy.	Hepatic cirrhosis.
Febrile.	Slightly pellagroid.
Toxic (gastroenteritis).	Nutritional.
Temporary mental confusion.	Blood W.R. ++
Pellagra.	Hepatic cirrhosis.
Febrile.	Pellagroid.
Hepatic cirrhosis.	Pellagroid.
Toxic (gastroenteritis).	Pellagroid.

COMMENT

It is fully appreciated that this study deals with only those cases admitted to a male medical ward and that the figures apply only to a series treated by a physician. The figures would certainly differ if taken from a psychiatric institution or in a clinic where many out-patients are seen and treated. Here probably lies the basis for a worthwhile social study of the urban African in his attempt to adapt himself to his new environment. It would also be of value to learn how often a similar mental imbalance occurs in a more traditional African society. In the present series of cases no example of Bantu porphyria with temporary mental confusion was found. This is interesting, as it would tend to support the opinion that mental disturbance in Bantu porphyria is uncommon. In the series there were four subjects with deeply pigmented facies, but none with the typical syndrome associated with increased excretion of porphyrins.

In this study one is at once confronted with the thought as to whether *amok* as occurs in the Far East has something in common with the more violent forms of idiopathic temporary mental confusion now being described.

REFERENCES

- LAMBO, T. A. (1960). *Brit. med. J.*, 2, 1696.
 SMARTT, C. G. F. (1962). Personal communication.

Addendum

Dr. Smartt has just submitted a comprehensive study in which the subject of "temporary mental confusion" is fully dealt with from the psychiatric aspect.

Acknowledgment

I wish to thank Dr. W. Sheffield for his permission to publish this study.