

## LECTURES AND ADDRESSES

### FANTASIES AND FITS\*

C. A. H. WATTS, M.D., D.(OBST.)R.C.O.G.

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Febrile convulsions are a commonplace event in the experience of any doctor. The patients seldom come to any harm and the incident is soon forgotten. To the mother, the problem is much more serious. Is the child epileptic? Will the symptoms affect his mind? Is it the beginning of meningitis or mental illness? Will it leave some indelible mark upon his brain? These are some of the queries which distress her. Few experiences are more frightening and upsetting to the layman than witnessing a fit or even a faint, perhaps because it reminds him subconsciously of sudden death. Wanderings and delirium, too, cause great anxiety among relations, because they resemble hallucinosis which is almost synonymous with insanity in the lay mind. As experience increases in general practice, it becomes obvious that our patients suffer considerable anxiety from many bizarre and frightening events which occur in the borderlands of consciousness. Because these episodes are fleeting and devoid of physical signs which demand explanation, they tend to be dismissed without much thought. They certainly do little to undermine physical health, but they are very fruitful causes of anxiety. If time is taken to consider them, many can be classified as well known phenomena although little is found on this subject in medical text-books.

#### **Hypnagogic Imagery**

Many queer things happen in the approaches to normal sleep. My attention was first drawn to this subject by one of my depressed patients. He was a true endogenous depression who had had several episodes which cleared rapidly with electropexy. His insomnia was not the typical early waking type, indeed he had difficulty in dropping off to sleep because he saw such nasty faces. He wasn't asleep and he could see the faces with his eyes open. They appeared on the wall and their horrible grimacing frightened him. I had never come across this phenomenon before and I started to question other people. I questioned patients and groups of people and once I had made clear the nature of the enquiry, the odd member would volunteer similar experiences. I found about ten per cent of the population are regular viewers of this hypnagogic imagery. Another group of people are aurally alert. As they lie preparing for sleep, words flow through the mind at great speed. Sometimes the stream

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is in the form of a poem, or an oration, or it may just be a meaningless deluge of words. There seems to be a difference between visual and auditory imagery. The former can be described by the subject in a running commentary, but with the word flow, any attempt to record it or repeat it blocks the process at once. This is no short cut for the poet or the orator! Instead of being visual or auditory, the hallucinosis may occur as some alteration in the body image. This form of imagery is probably the rarest and it doesn't occur every night. One man said that sometimes, as he dropped off to sleep, his outside went down and his inside went up. Another said that with each inspiration he blew up to the size of a barrage balloon, and with each expiration he became as thin as a pencil. There are an infinite number of possible contortions, many of which were described by McKellar and Simpson<sup>1</sup>.

Another curious phenomenon is that of sleep paralysis. I have so far located four such cases, all of which occurred on waking, and not on dropping off to sleep. The patient becomes mentally awake. She can hear the clock ticking, the birds singing and so on, but she cannot move a finger or open her eyes for a minute or so, until motor awakening has occurred. One woman told me that, in her younger days, she was so afraid of this awful feeling she dare not drop asleep in the day time, it was so unpleasant to wake up. One of my patients who was prone to such attacks developed a depression and had E.C.T. for it. He was given a relaxant but no pentothal. He told me the feeling before he had the treatment was just like sleep paralysis. Sometimes the opposite state of affairs takes place. The motor side awakens before consciousness has returned. This occurs in children and it is an alarming experience for parents. The child starts shouting, struggling and letting fly at anyone who tries to touch her. She does not recognize her parents, who get into a panic. Suddenly recognition dawns, the child smiles and wonders what all the fuss was about. This kind of thing differs in essential features from a nightmare. The child is always quite calm and unperturbed after the attack in which she has behaved like a thalamic cat. A bad nightmare just prior to waking leaves some trace of its horror behind, but in this type of case, it never does. It is the parents who need to be reassured, not the child.

A reasonable explanation of these experiences is that going to sleep is not like turning off a light. Nor does everyone awaken in one piece, as it were. Different areas of the sensorium remain alert longer than others. If the visual cortex is the last to black out, visual imagery will occur, if the temporal lobe, words will be heard, and so on. Some people go through life with experiences such as these almost every night. With others, they only occur at

intervals. This is usually the case with sleep paralysis. Occasionally, people who never have such feelings get them in illness. During the influenza epidemic a child told his mother she looked smaller. A woman got into a panic because her right arm started swelling and subsiding, and when she looked at the windows they kept altering shape, sometimes getting larger and sometimes smaller. It is suggested that Lewis Carroll had such experiences from which he evolved *Alice in Wonderland*. A man with sinusitis was in agony because of his headache. Nothing eased the pain so I tried the effect of inhaling amyl nitrite. It did not help him but afterwards he told me his head seemed to become shaped like a dunce's cap and when I had gone he had to put his hand on his head to assure himself of its normality. It is possible that some ghosts find their origin in such phenomena. One of my patients, who was a conscientious churchwoman, went to bed very tired one night, and instead of saying her prayers at the bedside, she said them in bed. At the point of dropping off to sleep, she saw an apparition. It was very vivid and frightening. She was not asleep. She awakened her husband but he could not reassure her, and for days she was afraid to go up to her bedroom in case she saw her vision again. People develop all sorts of rituals to try to evade hypnagogic imagery. One woman found that she could avoid them by switching off the light with her head under the clothes. Most people seem to accept these phenomena with admirable calm and fortitude, but for patients who do worry about their significance, they become a source of great strain and anxiety. If the patient is worried by this type of thing, reassurance is a great help.

### Temporal Lobe Epilepsy and Allied Phenomena

In my view, hypnagogic phenomena are the products of the last piece of the sensorium to remain conscious. In other words, these queer happenings take place when only a small portion of the cortex is acting on its own. In some forms of epilepsy we have a similar occurrence, only the process is pathological in that, quite spontaneously, a portion of cortex overacts. It can, in the waking or sleeping individual, produce queer feelings. We all recognize grand mal, and episodes of petit mal, but I am sure vast numbers of other epileptic phenomena go by unnoticed. The march which can occur in Jacksonian epilepsy is well known. The little finger starts to twitch, then the whole hand, next the arm, and finally a major convulsion may occur. This march can be noticed in emotional or sensory fits. For instance, a buzzing sound may be followed by fear, which is followed by numbness of the right hand. The curious alterations of body image that occur in hypnagogic imagery are repeated. Dennis Williams gives many interesting histories<sup>2</sup>. In

his series the patients were all true epileptics, in that grand mal occurred at intervals or followed these curious sensory experiences. I have, over the past years, collected a small series of such cases but in these a history of grand mal is not always present. These patients show that it is possible for the sensory or emotional attacks to occur without the onset of major epilepsies, but cases of this type are not easy to locate. The patient does not easily admit to queer experiences because of the critical reaction to such an admission. In routine questioning of a depressed patient, it emerged that he had for years had feelings of unreality. It was just as if he had stepped out of himself for ten minutes. His body went on working but it ceased to think like a normal person, and it was not him any more. In the army he unwisely asked a buddy if he had ever felt he was not there, and his friend gave him such a look he never asked anyone else about it. Sometimes the doctor assumes this attitude of incredulity, and many of these patients are labelled as neurotic, because of their curious symptoms. If they are lucky, they get a prescription for phenobarbitone, and a number improve considerably because of the anticonvulsant property of the drug.

The first case I picked up was a woman of 50. She said she could remember her initial attack vividly. She was then only 13, and she was playing marbles with friends. She suddenly felt terror-struck and ran home to her mother, but before she got there, the feeling had gone. She had several attacks after that, and still has them. One of the curious features of these attacks is the way in which her perception of time is changed. The attack of ictal fear comes on. She walks outside to work it off and feels frightful until it has gone. She thinks it must have lasted at least half an hour and is always surprised to find that no one has missed her as she had only been out of the room for a minute or so. As a young person, these attacks distressed her a great deal, but after 40 years, they don't worry her any more. The fear was always unnatural, not like fear of the dark, burglars, or something unpleasant.

Ictal fear may be accompanied by queer visceral sensations, an empty feeling in the stomach, a desire to belch or vomit and so on. This is illustrated in the following case.

Mrs C., aged 43, has had attacks on and off ever since August 1954. Her first bout was on holiday. She finds them difficult to describe but they are always the same. She has a queer feeling in the epigastrium as if she wants to rift but never does so. She has to sit down as she feels she is going to faint. She is frightened if she is alone, feels as if she was going to die. Attacks are not provoked by anything. They can come on at any time and have awakened her at night. She feels really ill for five minutes, and helpless for a further ten minutes. These have been cut out by sodium phenytoin.

Miss F., aged 43, was another of these cases. For ten years she had been liable to queer attacks she found difficult to describe. She felt faint and everything seemed to stop. She had a pain behind the eyes and a sick feeling in her stomach. The attacks often came on at night and she had three or four a week. They were getting more frequent and more severe. Her sister, having seen her on the road in an attack, said she looked drunk. Her mother stated that, after an attack, although not unconscious, she couldn't speak and forgot things. It seemed as if, although there was no falling, there was some partial interruption

of consciousness. This patient was put on to sodium phenytoin and has not had an attack for the past five years.

There is not always the feeling of fear. The man who had the feelings of unreality had no fear. He could not feel anything as he wasn't there.

Depression is sometimes an ictal phenomenon.

Mr B., aged 45, had attacks at one- or two-yearly intervals starting when he had fever in Burma in 1942. He feels "off" for a week and he is depressed, on edge and irritable and he knows he is in for an attack. During an attack, his head feels twice its size, he is floating on clouds, sometimes smooth, sometimes bumpy. He gets very lightheaded and is liable to shout and wander in his sleep. He feels worried in case he should do something wrong. After 36 hours he feels better and is all right until next time. He does not pass out, but he has feelings of unreality.

The patients distress over these curious sensations is illustrated in the following cases.

Mr P., a man of 40, is one of my most grateful patients. He had a grand mal attack, fell off his bicycle and hurt himself. As he had a history of blackouts, I put him on to phenobarbitone Gr.  $\frac{1}{2}$  and ever since, he has never failed to sing my praises. It wasn't until he was visited by a psychiatric social worker who took his history accurately, that I learned it was not the cure of the blackouts for which he was grateful. He never realized he had them. It was because I had removed feelings of unreality and ictal fear which had tormented him for years. These were the really troublesome symptoms.

Mr B. was a man of 24. He had a history of major convulsions, and I was doing a follow up of such cases. He said he had never had a blackout for five years, but he added ruefully, "I feel awful at times". He found it very difficult to explain his feelings. He had sudden attacks of acute fear. He had to jump up and rush out of the room or he felt he would collapse. This was accompanied by a queer feeling in his stomach and a desire to belch. The attacks only lasted a very short time but they distressed him greatly. His major convulsions had gone, but these were clearly attacks of temporal lobe epilepsy and he, too, liked them less than the complete blackouts.

The so called aura and temporal lobe phenomena which occur as part of the ictal attack are usually unpleasant. It must be pointed out that some patients have feelings of pleasure with the episodes, as in the case of the photogenic epileptic. The attack can be self induced by gazing into the sun and waving a hand rapidly before the eyes. This brings on an ictal attack of some sort which must be pleasurable, as these folk often cannot resist the temptation to produce them.

### Senile Epilepsy and Cerebrovascular Insufficiency

Epilepsy in the young is usually initiated by a cortical discharge. The lesion is primarily cortical. The incidence of epilepsy increases in old age, and then I suggest the lesion is usually vascular with secondary influences on the cortex. It is extremely difficult to sort out the pathology of these phenomena in old age. All kinds of attacks occur. Sometimes the seizures are typically of the classical epilepsies, responding to anticonvulsant therapy. Some-

times they are due to cerebrovascular insufficiency. Often it is impossible to decide the origin of the attack which might be cortical, centro-encephalic, or vascular in origin, or it might be a combination of various factors. Akinetic attacks are common. Without warning, the patient falls as if dead and may be out for only a few minutes, or as long as half an hour. Sometimes there are local fits, as in the old woman of 90, who used to smell that her room was on fire and take her bedding downstairs. By the time she was down, the smell had gone, and no one else was ever able to detect any smell of burning. Sometimes it is the drop syndrome when the patient simply tumbles in a heap for no apparent reason, often without any loss of consciousness. This type of case is really quite common.

Mrs E., aged 78, had had 10 or 12 falls before she called me in. For no apparent reason, her legs would give way under her and she would fall forward on to her hands and knees. She knew exactly what was happening but could not save herself from falling. She was given phenobarbitone Gr.  $\frac{1}{2}$  t.d.s. and has had no further attacks. The action of phenobarbitone is hard to explain as this drop syndrome is said to be a symptom of cerebrovascular insufficiency.

The following case was due to spasm of the basilar arteries.

Mr S., a man of 53, had bouts in which there were a thousand lights before his eyes. The attack lasted for half an hour or longer. He felt washed out afterwards, but had no headache. His first attack was in 1952 and it was always the same. He has had more than 12. He cannot read or write or watch television while they are on. He feels awful in himself and looks pale. He is compelled to lie down until it goes off. The lights are still there when his eyes are closed but they gradually pass off. He feels depressed for some two days afterwards.

Sometimes cerebrovascular insufficiency causes curious memory upsets. A patient of mine occasionally slips back fifty years quite suddenly, and this is strangely disconcerting for all concerned as, all at once, the conversation gets very involved. This situation lasts for half an hour or so and then she returns to the present.

Mr B., a man of 70, was ill in bed during the winter and it was snowing hard outside. When my partner entered the sick room, the old man waved him to keep quiet while he gazed with rapt interest out of the window. After a few minutes, he turned to my partner and said, with a bland smile, "I wanted to see them finish that over".

Periodic amnesia can be a difficult phenomenon to explain. It is said to be epileptic, depressive, or hysterical in origin. I know of three such cases.

Mrs P., a woman of 54, saw my partner because she had had a curious memory lapse. She could remember until 9.30 a.m. and nothing more until her husband came in for his dinner at 12.30. When he asked for his meal, she realized she had not prepared one. She was unable to account for the past three hours, and yet she realized she must have been busy as beds were made, and so on; jobs she must have done but had no recollection of doing. What caused this lapse? Epileptic amnesia is not compatible with purposive activity. There was no apparent motivation for the episode to make one conclude it was hysterical. She never was, and never has been, depressed. The cause of her memory loss remains a mystery.

### Acute Confusion and Hallucinosiis

It is often said that in this country we are so well fed that true avitaminoses never or hardly ever occur. Classical beri-beri is a rarity but, in my view, subclinical forms are not uncommon.

During the war, I saw cases of beri-beri and the thing that struck me was the dramatic response to the B complex. For instance, an Indian came under my care with a muttering delirium. He was very ill with heart failure, and the crazy paving type of rash on his neck suggested vitamin shortage. He was given large doses of the B complex and the next day he was completely rational and orientated.

The first florid avitaminosis of this country I came across, was a publican who had developed delirium tremens. He was tremulous, visually hallucinated, deluded, and disorientated. Intramuscular B complex and paraldehyde at night brought him back to normal in two days. A year later, I was sent for at closing time on a Saturday night. He was as bad as ever, and I had no B complex with me. I knew our village chemist would have nothing stronger than tablets so I ordered 50 Benerva Co and told him to take three every three hours. In two days he was back to normal again. I was surprised to find such a dramatic response to oral dosage.

The whole phenomena of delirium intrigued me and I decided to see how far the common delirium of a feverish child responded to B complex. Roche Products prepared dummy tablets, and my wife gave me a series of numbered packets, each containing ten B Complex tablets or dummies. She alone had the key. I distributed a packet of tablets to any light-headed person I met on my rounds, the idea being to get all ten tablets ingested by nightfall. The result was then estimated as follows:

GOOD                    If the patient slept well without any light-headedness.  
 BAD                     If delirium recurred.  
 DOUBTFUL            For intermediate results.

Over a period of eighteen months, I distributed some 35 packets and assessed the results before reference to the key. The following table gives the result of this small trial.

	<i>B Complex</i>	<i>Dummy</i>
Good .. .. .	14 (82%)	8 (44%)
Doubtful .. .	1	7
Bad .. .. .	2	3
TOTAL .. .	17	18

It is suggested that, even in the mild delirium of the feverish child, B Complex is useful. These vitamins play an important role in cerebral metabolism and I feel that in fever more may be necessary to maintain normal cerebration. A raised metabolic rate increases the need for the B Complex. During the war, all prisoners of war in Germany and Japan were short of vitamins, but it was among those who were compelled to do hard physical work that beri-beri became most obvious. I do not feel that the therapeutic aspect is important in children. Fever delirium is innocuous and short-lived in any case. Acute delirium and confusion in the aged is a much more alarming and serious matter. The family usually think that it is the beginning of the end with grandpa, and that if he doesn't end up by having a stroke, he will go permanently out of his mind. Maybe I have been fortunate, but in the small series of such cases which have come my way, the response to large doses of B Complex by day and paraldehyde draughts at night, have been successful.

Mrs S., a woman of 79, had acute on chronic bronchitis which was settling. On the fourth day, she screamed out because, she said, "There was a man on the dressing table". Next, she saw rabbits and then birds, coming down the chimney. She had a bad night with little rest or sleep. She kept watching a woman in the garden with a blue bonnet, who was stealing things. The furniture was being taken away and daubed up. When seen by me, she could not name the day. She stated there were chickens in the room and pointed them out to me. She had no insight. After vitamin B and paraldehyde at night, she slept well after a day of wandering, hallucinations and confusion. On waking, she affirmed that a woman and baby had slept with her, but her mind soon cleared and when I called later in the morning, she admitted to me that the chickens could have been visions.

One of the advantages we, in general practice, have over the consultants is that we can detect symptoms and signs at the earliest possible moment. The central nervous system in man is the most highly developed and sensitive organ, and minor upsets can be reflected in dramatic symptoms which may be missed because the patient does not reveal them, or because the doctor is not in a receptive mood to look for them and hunt them out. Many of the conditions I have described may seem trivial, but most of them bring with them a great deal of fear and anxiety either for the patient or the relatives; and they can produce emotional upsets often out of all proportion to the gravity of the symptom. If the family doctor can spot that feeling of near panic which the patient is trying to cover up, then he can, by explanation and reassurance, bring about immense relief. Many of these symptoms can be treated successfully by drug therapy. We have, in these territories of the mind, ground which is inviting further exploration. There is still a great deal of useful information waiting to be uncovered.

I would like to thank Dr Margaret Briggs of Roche Products for a supply of "Vitamin B Complex" tablets and dummies.

#### REFERENCES

1. McKellar P., and Simpson, L., 1954. *Brit. J. of Psychol.* 45, 4.
2. Williams, D., 1956. *Brain*. Part I, 29.