

PSYCHIATRIC PRESENTATION OF THALAMIC TUMOUR A CASE REPORT

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INTRODUCTION

PSYCHIATRIC SYMPTOMS frequently are the initial, and occasionally the only symptoms of intracranial tumour. (Mulder and Swenson, 1974). Such symptoms may precede by days or even months, the more obvious motor or sensory symptoms and findings of brain tumour. The following case report will highlight the diagnostic difficulty of such a tumour viz. a thalamic tumour, and emphasize the importance of psychiatric assessment in early diagnosis of such tumours.

CASE REPORT

A 40 years old Chinese clerk was admitted to the psychiatric ward in February 1979 with a diagnosis of reactive depression. Six months prior to admission, he said he was told by friends that his wife had been having an affair. Since then he had lost concentration in his work and had to bring his work home to complete. Initially, he had difficulty in sleeping but later, for the past three months, he was noticed to be sleepy most of the time and getting tired easily. Three weeks before admission, he was called up by his employer and informed that he was far behind in his work. He was threatened with dismissal if he did not show progress. This distressed him even further and his symptoms became worse. He was tired most of the time and sometimes complained that he did not even have the energy to walk. He kept to himself and stopped playing with his children. His appetite was poor. He complained of giddiness occasionally. Sometimes, when he was driving, he took the wrong turning. He was forgetful and had to be reminded to bathe, eat and brush his teeth. A diagnosis of reactive depressive illness was made on that occa-

sion in the out-patient clinic. He was started on amitriptyline 50 mg o.n. and told to come back in a fortnight. He made no improvement and was told to come into hospital.

On admission, he was rather withdrawn. He appeared to be in a daze. His speech was slow but he was coherent and relevant. His affect was flattened and he admitted feeling depressed, although he expressed no suicidal thoughts. He had no delusion or hallucination. He was well orientated to place, time and person. His remote memory was good but his recent memory and 5 minute recall was poor. He was able to think abstractly. He had good attention and was able to complete the serial seven test satisfactorily. His judgement was good. As for insight, he felt that he was sick because of 'weak nerves'. Physical examination revealed no abnormality at that time.

In the ward, he was idle most of the time. He was rather demanding and expected food to be brought to him, although other patients usually helped themselves. He was noted to be very precise and deliberate in his movements when he fed himself. When he changed his clothings, he discarded the old clothes on the floor, expecting the nurses to pick them up. In the ward, during visiting hours, it was noticed that his wife cut his nails and also helped with other matters. Apparently, she often did this while at home.

One week after admission, on reassessment, he was found to have poor orientation. He gave the date as 6th January 1979 when it was actually 8th February 1979. However, he was able to state that Chinese New Year was on 29th January 1979 but added that it was not over yet. His topographical orientation was poor as he was unable to give the directions from the nurses station to his bed. Yet he was able to find his way to the toilet. He was forgetful and complained that someone had stolen his clothes when actually, he had put them in the locker, a while earlier. He was unable to remember if he was visited the previous day. However, he was able to recall his children's ages and the schools they attend. Although he complained of weakness of his legs, there was no loss of muscle power. When another patient irritated him, he was able to get up steadily and chased him away. At this stage, he was tentatively diagnosed as having an organic

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brain syndrome and further investigations were ordered. A differential diagnosis of depressive pseudodementia was also considered as he appeared depressed and withdrawn and some of his symptoms was inconsistent. The latter differential diagnosis was strengthened when he made an initial improvement, appearing brighter and more spontaneous in his speech and action after being treated with amitriptyline 25mg t.d.s. He was able to go out to the day space and play table tennis, and socialize with other patients. He was seen reading story-books and newspapers. During the ward party, he voluntarily got up and danced with a female patient. He was able to collect his food-tray from the pantry and fed himself without spilling the food. When he took his bath, he knew exactly what he needed, namely his clothes, towel, soap and comb. Yet his orientation to date continued to be poor, although he was always just a few days off. However, on one occasion, when he doctor himself made a mistake in the dates, he was quick to make the witty suggestion that the doctor should get his own head examined. When he was seen reading the newspaper, he was able to recall what he had read, although at times, he made up his own story, when he could not remember. Usually, he was able to find his own bed but occasionally, he ended up in the wrong bed. At times, he was found standing in the bathroom, with the taps running and the sink overflowing. He was also seen walking around in his underwear and on one occasion, naked. Once, he took an empty dustbin and wanted to put it on his head. However, when stopped, he was able to put the dustbin back to its original place with no difficulty at all. It was noticed that his behaviour was more "child-like" when his wife was around, suggesting that he was employing "hysterical mechanisms."

Three weeks after admission, his behaviour became more regressed. He developed incontinence of urine. He was messy and spilled his food. He was noticed to be unsteady on his feet. He was referred to the neurologist who was unable to detect any localizing signs. The only positive findings were pathological withdrawal and positive chaddock's reflex of both feet, and equivocal palmomental and rissel's reflex.

His urine, full blood count, blood VDRL and TPHA tests were normal, as were his chest and skull x-rays. He had difficulty in copying accurately the simple designs in the Bender Gestalt test, and yet was able to draw a man accurately with elaborate details. Psychological testing was done, but as he was generally slow, it was interpreted with caution, but suggested that his clinical picture was organic, probably due to a fast growing lesion. His score was generally low

on the WAIS. Lumbar puncture was clear, with negative culture. His EEG recorded in wakefulness was moderately abnormal. The abnormality appeared to be localized to the right anterior quadrant especially the temporal and the adjacent superior frontal region. The findings were reported as consistent with that seen with a focal lesion such as a space-occupying lesion localized to that region. However, his cerebral dynamic study and static brain scan appeared normal. He was finally sent on 5th March 1979 for a computerized axial tomography (CAT) scan, which showed conclusively, a space-occupying lesion over the right thalamus, causing obstructive hydrocephalus. (Fig. 1 and 2)

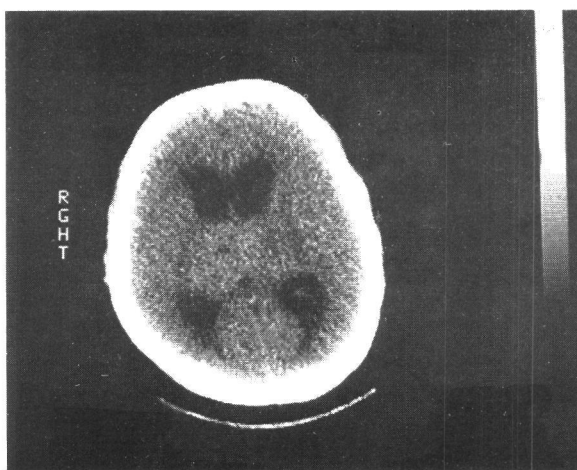


Fig. 1 Pre-Contrast examination showing shift of the third ventricles and lateral ventricles.

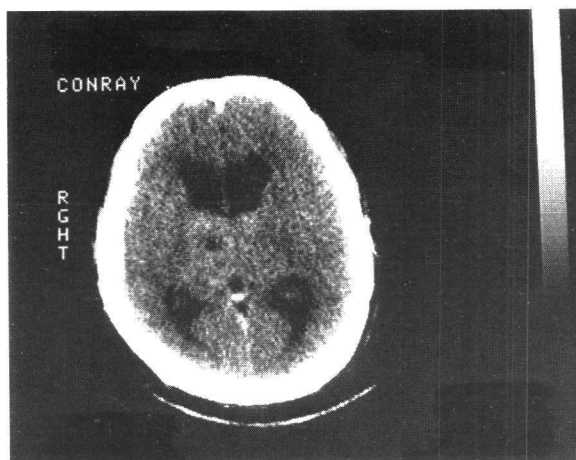


Fig. 2 Post-Contrast examination shows an enhanced area over the right thalamic region and extending into the 3rd ventricle.

PROGRESS

The patient was transferred to the medical ward for further management. An angiogram was done which revealed a tumour of moderate vascularity. The neurosurgeon was consulted and he was of the opinion that surgical procedure was not advisable. The patient was offered radiotherapy but his wife refused as she was adamant on having surgery performed in China in spite of being advised against it. Most authors are of the agreement that direct operative attack is not the treatment of choice, except in the unusual occurrence of a vascular malformation (Payne, 1974). Palliative surgical measures are advised, with the most suitable being ventriculocisternostomy followed by radiotherapy. Other workers advocated radiation therapy alone, at the same time with a plea for early diagnosis.

The prognosis for this patient is poor, in view of his rapid deterioration. In general, patients do not usually survive for more than a few years (Payne, 1974).

DISCUSSION

The differentiation between depression and a fluctuating or progressive dementing process is an increasingly frequent problem in diagnosis and management as both conditions occur more frequently with advancing years. Occasionally, an early organic process may be overlooked, particularly if behavioural changes occur with little or no intellectual impairment or if the condition is masked by the florid features of a functional psychosis (Kiloh 1961). This is the situation in this patient, who presented with the features of a depressive illness. When he showed memory disturbance and poor orientation, it was felt that the picture could still be that of a depressive pseudodementia as described by Kiloh (1961). This condition is of a functional origin where there is sufficient confusion and memory impairment present, that the picture of dementia is closely mimicked. The most common condition in which the erroneous diagnosis of dementia is made is in endogenous depression. As a result of loss of concentration and severe retardation, there is poor registration, resulting in an apparent failure of recent memory, inaccurate orientation and a poor knowledge of current events. Some carelessness in personal habits due to depressive preoccupation and neglect of the personal hygiene may strengthen the impression of dementia. Kiloh advised that at any age, every time the diagnosis of dementia is being considered, the possibility of depression is worth bearing in mind. However, in this patient, the reverse is true. His dementia was initially thought to be due to depression. Therefore, it is advisable that everytime the diagnosis of a depressive ill-

ness is being considered for the first time in an older person, the possibility of dementia should be entertained and the patient's memory and orientation should be tested at regular intervals, besides the neurological examination.

The patient's favourable response to antidepressants added confusion to the diagnosis as it suggested a depressive illness. However, it must be noted that depression can be a feature of brain tumours (Mulder and Swenson, 1974) and dementia (Roth and Myers, 1969). Initial response to antidepressants is due to the amelioration of the depression in such patients.

The inconsistency in the patient's cognitive impairment was thought to be due to hysterical mechanisms. Although his orientation for time was poor, yet he was never far off the mark, and these approximate answers were similar to that seen in the Ganser Syndrome (Whitlock, 1967) and reinforced the impression of pseudodementia. It is known that in pseudodementia, the patient may do badly on some simple tests of memory and intellect but unexpectedly well on others, and his performance varies considerably from day to day. In retrospect, however, this inconsistency in cognitive function is quite acceptable as mental symptoms of patients with brain tumours are most varied, not only from patient to patient, but also in the same patient from hour to hour (Mulder and Swenson, 1974).

The relative absence of neurological signs is not surprising considering the site of the tumour in this patient. Thalamic tumours are relatively rare, accounting for approximately 1% of all cerebral neoplasms (Payne, 1974). They tend to occur more frequently in the males than females. The duration of reported symptoms from initial onset to time of hospitalization is quite short as in the case of this patient, usually less than six months. Headache is the typical first symptom. Other signs of increased intracranial pressure soon follow, including nausea, vomiting, apathy, drowsiness, mental and emotional changes, the most frequent of which are confusion, memory loss, emotional lability, indifference, apathy and mental dullness. Frank psychotic manifestations may be present. In retrospect, this patient's suspicion of his wife's infidelity is probably a delusion. Our interview with her showed that this was not a real problem. Thalamic dementia is seen when there is a rapid evolution of memory loss progressing to profound dementia, especially when there is bilateral involvement affecting the medial thalamus (Payne, 1974). Hemiparesis is the most common physical finding, followed by papilloedema and eye signs such as visual field defect and abnormal pupillary reaction. However, this patient did not have all these signs at all, except much later, when he had ataxia

and incontinence of urine. The initial signs and symptoms are usually caused by increased intracranial pressure which tends to occur early because of the proximity of these lesions to the outflow tract of the third ventricle. In addition, dementia is particularly likely to occur when the tumour is at the region of the third ventricle (Kiloh, 1961). This is probably due to the resultant hydrocephalus. The classical thalamic syndrome is a relatively infrequent occurrence, although in many cases, features of the syndrome appear when sensory changes occur (Payne, 1974). Brain and Walton (1969) stated that thalamic over-reaction is most often seen after vascular lesions and is rare after other types of lesion. Damage to the lateral nucleus is necessary for it to occur.

This case report highlights a few points in the diagnostic difficulties that may occur in differentiating between depression and dementia. It is advisable to consider the possibility of an organic brain syndrome every time the diagnosis of depressive illness is being entertained, especially in patients who become ill for the first time after the forties. When a diagnosis of organic brain syndrome is strongly suggestive on history, even in the absence of positive neurological findings, further investigations such as EEG, psychological testing, brain scan and CAT scan should be carried out. A negative brain scan does not exclude the possibility of small tumours. The CAT scan is an effective and painless ancillary aid, as demonstrated in this case.

SUMMARY

Psychiatric symptoms frequently are the initial and occasionally the only symptoms of intracranial tumours. Such symptoms may precede by days or even months, the more obvious motor or sensory symptoms and findings of brain tumour. A case is presented to highlight the diagnostic difficulties of such a tumour, viz. a thalamic tumour, and emphasizes the importance of psychiatric assessment in early diagnosis of such tumours. The differentiation between depression and a fluctuating or progressive dementing process is an increasingly frequent problem in diagnosis and management as both conditions occur more frequently with increasing years. It is advisable to consider the possibility of an organic brain syndrome every time the diagnosis of depressive illness is being entertained, especially in patients who become ill for the first time after the forties.

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