SHORT REPORT

Of insects and eggs: a case report

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Abstract

A middle aged woman presented with delusions of infestation and multimodal hallucinations due to an underlying glioma of the corpus callosum. After surgery, the phenomena in question changed and finally disappeared. A recurrence of the tumour caused dementia.

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Bers and Conrad in 1954 described the phenomenon of "chronische tactile Halluzinose" as commonly occurring in women over 50 who complained of parasites under their skin.¹ Whereas these authors took the view that tactile hallucinations may be the primary disorder, Anglo-Saxon psychiatry regards these states as primarily delusional.² Delusion of infestation or delusional parasitosis is not uncommonly associated with organic pathology.³ We report a patient with a glioma of the corpus callosum who presented with delusions of infestation and multimodal hallucinations.

Case report

A 50 year old housewife was referred to the psychiatric outpatient department with a two month history of washing her hands and legs and complaining that ants were crawling over her skin and biting her. The patient also described the insects vividly as being four to five in number, each the size of a "gram" (lentil seed), with wings, and crawling in the bathroom. She would spend much time in the bathroom, at times repeatedly throwing water to wash them away, at other times leaving water for them and enjoying watching them drink. She also reported hearing mice scurrying around the house. She did not complain of any other auditory phenomena but became extremely slow and socially withdrawn. She had reduced sleep and appetite, and complained of multiple somatic complaints.

She gave a history of cold intolerance and constipation. There was no history suggestive of confusion or of any cognitive decline. Her daughter reported that the patient had complained of an occasional right sided headache, throbbing in nature, remitting spontaneously.

There was no accompanying blurring of vision or vomiting. There was no history of any loss in consciousness or seizures.

There was no history of significant mood disturbance nor any of first rank symptoms of schizophrenia.

A mother of five, there was no history of medical or psychiatric illness, and no family history of psychiatric illness.

Mental state examination disclosed a middle aged woman of average build. Her speech was relevant and coherent, but her verbal output was minimal, unless in response to questions. She had delusions of infestation (of ants inside her body), tactile hallucinations of ants biting her on her arms and legs, visual hallucinations of insects, which she vividly described, and occasional elementary auditory hallucinations. Her affective responses were adequate. On clinical testing her attention could be aroused and sustained. Her memory for recent and remote events was intact. She was well oriented to time, place, and person. She lacked insight.

Her general physical examination was unremarkable. Neurological examination including fundal examination was normal. A provisional diagnosis of delusional disorder was made under the International Classification of Diseases, 10th revision, and she was started on 2 mg pimozide once daily.

Routine investigations were normal. Thyroid function tests were within normal limits.

Brain CT (figure 1) disclosed a mixed density mass lesion with predominant hypodensity in the left parafalcine region, contiguous with another irregularly mixed density lesion in the right frontal lobe, suggestive of a corpus callosal glioma with bifrontal extension.

While waiting for neurosurgery she had a seizure and developed difficulty in walking and urinary incontinence. She underwent a frontal craniotomy with decompression of the tumour that proved to be a mixed glioma with cystic changes.

Her immediate postoperative recovery was uneventful. Urinary incontinence persisted. She received a course of radiotherapy, and was also given 200 mg phenytoin per day.

Her next follow up in psychiatry was two months after surgery. At this time, the urinary incontinence persisted. The family reported some loss of memory, especially for events around the time of the surgery. It was also reported that the patient was repeatedly dusting beds and flicking things off the table.

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Figure 1 Mixed density mass lesion with predominant hypodensity in the left parafalcine region, contiguous with another irregularly mixed density lesion in the right frontal lobe.

On interview, she reported seeing insects' eggs everywhere, and said that she was trying to remove them from the furniture and linen. She showed attentional impairment. She was oriented to person, place, and time of the day, but not to the month. Her five minute object recall was satisfactory.

By four months psychiatric follow up she had become extremely withdrawn and apathetic. The urinary incontinence and deficits in memory persisted. Visual hallucinations or beliefs of infestation could not be elicited.

By her eight month psychiatric follow up she showed a week's history of drowsiness, double incontinence, pronounced deterioration in memory, and unsteadiness of gait. On examination, she was ataxic, and had papilloedema of the left fundus. Neurosurgical assessment disclosed a left lateral rectus and left facial palsy, and brain CT (figure 2) showed recurrence of a large bifrontal corpus callosal tumour, with hyperdensity in the right occipital horn.

The patient was given steroids and anticonvulsants and was referred to the radiotherapist. A decision not to undertake any further active intervention was made, and the family was counselled.

Discussion

The psychiatric manifestations of corpus callosal tumours have been described for over a

Figure 2 Large bifrontal corpus callosal tumour with hyperdensity in the right occipital horn.

century.^{4 5} Various described as a "psychic syndrome" or "syndrome mental calleux" they include apathy, incoherent thinking, unstable mood, defective memory, peculiar movements, and character change. To our knowledge, however, no case has yet been reported of a corpus callosal glioma presenting with delusions of infestation and hallucinations.

An interesting aspect of this case concerns a possible relation between location of tumour and symptoms. The tumour seemed to comprise the postcentral somatosensory cortex, in which the leg has a large area of representation. Irritation of this area may have produced paraesthesia, which were interpreted as bites, and subsequently elaborated by the patient as being caused by ants. This supports the view that the primary experience in many cases is previously sensorial and only later leads to delusional explanation.³

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