MANIA FOLLOWING TYPHOID: A CASE REPORT

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Mania following or associated with medical and pharmacological conditions is well known. However there are not too many reports of mania following typhoid fever. This paper describes a mania syndrome following successfully treated typhoid fever in a young male without any past or family history of psychiatric illness or associated psychosocial stressors.

Key words: secondary mania, organic manic syndrome/disorder, typhoid fever, Ciprofloxacin, hypergraphia.

INTRODUCTION

Krauthammer and Klerman (1978) reviewed all cases reported in the English and French literature of mania following or associated with medical and pharmacological conditions and coined the term Secondary Mania for these cases. DSM III-R includes such cases under organic mood syndrome, mania, the criteria for which are as follows:

(a) prominent and persistent elevated or expansive mood,

(b) there is evidence from history, physical examination, or laboratory tests of a specific organic factor (or factors) judged to be etiologically related to the disturbance, and,

(c) not occurring exclusively during the course of delirium.

The ICD-10 criteria are more rigid in that the temporal relationship is defined as between weeks or a few months, there should be remission of symptoms on removal of the cause and there should be absence of highly loaded family history or precipitating stress.

CASE REPORT

Mr. U.S., an eighteen year old, unmarried, male student presented to the casualty of this hospital with an acute onset episode of mental illness of 10 days duration characterized by over activity, domineering boastful behavior, overtalkativeness, claiming special abilities, undue and excessive happiness, assaultiveness, decreased need for sleep, increased appetite and overfamiliarity with strangers. For fifteen days prior to the onset, the patient was having a febrile illness. At the height of the fever (104°F), on three occasions the patient had appeared agitated, perplexed, was misidentifying people and reported seeing people approaching him with weapons in the nursing home where he was admitted on the fifth day of the fever.

He was apparently unaware of his surroundings and had also talked irrelevantly during these periods which lasted for a maximum of 30-45 minutes each time. The fever was diagnosed to be enteric fever on the basis of blood culture and Widal test. The patient was treated with Ciprofloxacin. Symptomatic and supportive management was also given. By the 12th day his fever had subsided and the patient was discharged. The mental symptoms described above evolved over a period of seventy two hours on reaching home. No psychosocial stressors were reported.

There was no past or family history of psychiatric illness. There was no history of alcohol or drug abuse. Premorbidly he was an extroverted individual. Physical examination did not reveal any abnormality. Mental status examination revealed marked psychomotor agitation, poor attention span, pressure of speech with flight of ideas, grandiose delusions of ability and identity, euphoric affect and absent insight. The patient was oriented to time, place and person.

At our center the Widal test was found to be negative and the blood culture was sterile. Hematological investigations, serum electrolytes, liver functions, urine (routine and microscopy) blood urea, serum creatinine were also found to be normal. EEG showed random symmetrical monomorphic 6 Hz low amplitude theta over bifrontocentral areas, lasting for one second. The neurologist opined that this was suggestive of mild bifrontal dysfunction. He received a score of 28 out of 30 on Mini Mental State examination losing one point for serial seven subtraction and another for not being able to tell the correct season.

Apart from the findings mentioned above, in the ward, the patient showed impulsivity, irritability, assaultiveness and marked hypergraphia. He wrote copious notes, filling up several copy books, mostly about his grandiose future plans.
He was treated with lithium carbonate to a maximum dose of 900 mg/day and haloperidol to a maximum of 20 mg/day. The patient showed adequate improvement and was discharged after 2 weeks, the serum lithium level being 0.8 mEq/L. He has been coming regularly for fortnightly follow up, is keeping well and is now only on lithium carbonate 900 mg/day.

**DISCUSSION**

A manic syndrome in association with enteric fever has been reported by Khosla et al (1977) and by the first author and his senior colleague (Das & Khanna, 1993) from another center in this country. This particular case fulfills all the criteria for secondary mania proposed by Krauthammer and Klerman (1978) and for organic manic syndrome/disorder by ICD-10 and DSM III-R. Since the manic syndrome developed after subsidence of fever and in close temporal association, the particular ICD-10 requirement of remission of symptoms on removal of the cause does not apply to this case. It is also interesting to note that the patient had become delirious on three occasions but the manic syndrome developed much later and in clear sensorium.

Though cognitive deficits are not a must for a diagnosis of organic mania they have been reported by other authors (Hoff et al, 1988; Das & Khanna, 1993). Our patient did not have significant cognitive deficits. Irritability and assaultiveness in organic mania as compared to bipolar mania have been reported (Cook et al, 1987; Das & Khanna, 1993) but we are not aware of consistent hypergraphia being reported in such cases. EEG abnormalities have been reported in organic mania (Hoff et al 1988).

The issue of treatment efficacy of various pharmacological agents in organic mania is still quite open. Another interesting aspect in this case is the effect of Ciprofloxacin. A computer aided search of the literature failed to unravel any association between mania and Ciprofloxacin. This could be an area for further enquiry.

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