

## MANIA ASSOCIATED WITH HEPATITIS B : A CASE REPORT

RAMANAND SATAPATHY, M. JAI PRAKASH BABU,  
V. PADMA & M. VIJAY GOPAL

### ABSTRACT

Mania following or associated with medical and pharmacological conditions is well known. However there are no reports of mania in a case of acute viral hepatitis B infection. This paper describes a manic disorder in a young female with acute viral hepatitis B infection, without any past or family history of psychiatric illness or associated psychosocial stressors.

*Key Words* : Organic manic disorder, secondary mania, serum hepatitis, acute viral hepatitis B, icterus, jaundice

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. ICD-10 and DSM-IV includes such cases under F 06.30 organic manic disorder and 293.83 mood disorder due to a general medical condition with manic features respectively, the criteria for which are as follows :

- (a) prominent and persistent elevated, euphoric or irritable mood,
- (b) there is evidence from history, physical examination, or laboratory tests or 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 rigid criteria is that the temporal relationship is defined as between weeks or a few months from the development of the underlying disease and onset of mental disorder and recovery from the mental disorder following removal or improvement of the underlying presumed cause; there should be absence of highly loaded family history or precipitating stress.

### CASE REPORT

Mrs. S.L., an eighteen year young, married, female housewife, hailing from a lower middle class joint family of rural background, having no past or family history of any mental or physical illness was admitted to the inpatients psychiatric services of Government hospital for mental care, Viskhapatnam, with an acute onset episode of mental illness of 15 days durations characterized by over activity, domineering/boastful behaviour, overtalkativeness, claiming special abilities, undue and excessive happiness, decrease need for sleep, over familiarity with strangers, talking high of self, dancing and singing songs in public, running on to the hills, commanding, demanding good clothes/food, assaultiveness and abusive in vulgar language.

The mental symptoms described above evolved over a period of fifteen days, along with gradual progressive yellow coloration of urine and conjunctiva. No psychosocial stressors were reported. There was no history of alcohol or drug abuse. Premorbidly she was an extroverted individual. Physical examination did not reveal any abnormality except deep icterus. Mental status examination revealed marked

## MANIA ASSOCIATED WITH HEPATITIS B : A CASE REPORT

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.

Investigations, in urine, bile salts and pigments were present. Haemoglobin was 9 gm%, serum vandenburgh one minute positive, serum bilirubin - 9.6 mg %, SGPT=320 K units & serum was positive for HBsAg. EEG showed a mixture of alpha and theta activity symmetrically. The neurologist opined that this was suggestive of mild dysfunction. She 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 and assaultiveness.

She was treated with haloperidol to a maximum of 20 mg/day. The patient showed adequate improvement and was discharged after 4 weeks, the serum bilirubin level being 0.6 mg% she has been coming regularly for fortnightly follow-up, is keeping well and is now only on Haloperidol 3 mg/day.

The BPRS scores are well correlated with serum bilirubin, SGPT and haloperidol requirement as follows :

Day	BPRS score	Serum bilirubin	SGPT	Haloperidol
0	45	9.6 mg%	320 K units	10 mg twice daily
7	32	8.1 mg%	280 K units	10 mg twice daily
14	22	6.3 mg%	210 K units	10 mg at bed time
21	14	4.0 mg%	90 K units	5 mg at bed time
28	2	0.6 mg%	16 K units	3 mg at bed time

EEG was repeated on 28th day before discharge. It showed that theta activity is replaced by alpha activity to almost a

normal record.

## DISCUSSION

This particular case fulfils all the criteria for secondary mania proposed by Krauthammer and Klerman (1978) and for organic manic disorder by ICD-10 and DSM-IV. The manic disorder developed in close association with acute viral hepatitis B infection (serum bilirubin 9.6 mg% and remission of symptoms on removal of the cause (serum bilirubin 0.6 mg %) apply to this case, the particular ICD-10 and DSM-IV requirement.

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), this 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). EEG abnormalities have also been reported in organic mania (Hoff et al., 1988; Lishman W.A., 1987) and Mrs. S.L. showed EEG abnormality at the time of admission and the recording was almost normal at the time of discharge.

## REFERENCES

- American Psychiatric Association (1994) Diagnostic and statistical manual of mental disorders, Edn. 4th, Washington, D.C. : American Psychiatric Association.
- Cook, B.L., Shukla, S., Hoff, A.L. & Aronson, T.A. (1987) Mania associated with organic factors. *Acta Psychiatrica Scandinavica*, 76, 674-7.
- Das, A. & Khanna, R. (1993) Organic mania syndrome ; causative factors, phenomenology and immediate outcome. *Journal of Affective Disorders*, 27, 147-153.
- Hoff, A.L., Shukla, S., Cook, B.L. Aronson, T.A. Ollio, C.L. & Pass; H.L. (1988) Cognitive dysfunction in manics with associated neurological factors. *Journal of Affective Disorders*, 14, 251-5.

**Krauthammer, C. & Klerman, G.L. (1978)** Secondary mania. *Archives of General Psychiatry*, 35, 1333-9.

**Lishman, W.A. (1987)** Hepatic disorder. In : *Organic Psychiatry*, Edn 2nd, London : Blackwell Scientific Publication.

**Overall, J.E. & Gorham, D.R. (1962)** The Brief Psychiatric Rating Scale. *Psychological Reports*, 10, 799-812.

**World Health Organization (1992)** International classification of disease, Edn 10th, Geneva : World Health Organization.

---

*RAMANAND SATAPATHY*\*, M.D., Assistant Professor, *M. JAI PRAKASH BABU*, M.D. (Biochemistry), Clinical Laboratory in-charge, *V. PADMA*, M.B.B.S., Postgraduate Student, *M. Vijay Gopal*, M.D., Professor, Head and Superintendent, Government Hospital for Mental Care, Visakhapatnam-530 017.

\*Correspondence