

## TERTIARY SYPHILIS PRESENTING AS MANIC DEPRESSIVE PSYCHOSIS

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With the advent of Penicillin, tertiary manifestations of syphilis have become a rarity, while atypical forms are often encountered. Usually the form of neurosyphilis seen by psychiatrists is General Paresis of the Insane (GPI) and Taboparesis. Unlike the grandiose forms seen earlier, the cases of GPI today present with a dementic picture (Dewhurst, 1969; Hahn, 1959). We report a case where Tertiary Syphilis presented initially as Manic Depressive Psychosis.

### CASE REPORT

A 42 year old male presented with 15 days duration of talking excessively, diminished sleep and increased activity for the first time. There was a history of venereal disease 15 years ago that was treated with some antibiotics. On psychiatric examination he was restless, had elated mood, flight of ideas and grandiose delusions. No cognitive changes were noted and patient was uncooperative for psychometry. His systemic examination was normal. His blood VDRL test was negative. He was diagnosed as Manic depressive psychosis-Manic type. After a week of non-responsiveness to oral Haloperidol 40 mg. per day and difficulties in management, Electroconvulsive Therapy (ECT) was instituted. After 8 ECT's patient was relieved of his manic symptoms and was discharged on Tab. Haloperidol 15 mg. per day. No cognitive changes were noted at discharge.

After 2 months relatives noticed lethargy, dullness and easy fatigability in the patient. On psychiatric examination his mood was de-

pressed and psychomotor retardation was present. He was diagnosed to be in the depressive phase of Manic depressive psychosis. After one month of Imipramine 200 mg. per day, since the response was not adequate ECT's were instituted. Though the depressive symptoms improved after 3 ECT's, the patient developed confusion after the 4th ECT. The ECT's were stopped, all the medications omitted and patient admitted for observation.

On psychiatric examination patient's orientation was inadequate and he showed intellectual and memory impairment. On Central Nervous System examination: the pupils were unequal, sluggishly reacting to light, but reacting to convergence. His deep reflexes were brisk. His cardiovascular examination revealed a loud aortic component of 2nd heart sound and a high pitched grade 2/6 early diastolic murmur in 2nd right intercostal space. The findings were suggestive of aortic regurgitation.

The Bender Visual-motor Gestalt Test showed cognitive impairment with a score of 92. The Wechsler Adult Intelligence Scale revealed a discrepancy in verbal and performance Intelligence Quotients (I.Q.). The verbal I.Q. was 78 and the performance I.Q. was 54. On Wechsler Memory Scale a memory quotient of 62 was obtained. The blood VDRL was negative. The X-ray chest showed cardiomegaly. The Electrocardiogram showed left ventricular hypertrophy by voltage. The electroencephalogram showed generalised theta activity. On cerebrospinal fluid

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(CSF) examination—proteins were 100 mg. percent; lymphocytes 60 per cubic millimeter. The VDRL was negative and the fluorescent treponemal antibody absorption test (CSF FTA-ABS) was positive. The Computerised Tomography scan showed mild ventricular dilatation with no infarcts. The 2 dimensional echocardiogram revealed mild aortic regurgitation.

The patient was diagnosed as Tertiary syphilis with Central Nervous System and Cardiovascular System involvement and treated with therapeutic doses of penicillin. After 6 months the patient was again clinically evaluated and investigated. His cognitive functions showed improvement, confirmed by psychometric testing. On CSF examination the proteins were 40 mg. per cent, the lymphocytes were 8 per cubic millimeter and the VDRL was now positive with a titre of 1:16. Subsequent follow-up at 1 year and 2 years showed that the improvement was maintained at home as well as at work.

## DISCUSSION

Unlike in the past when General Paresis accounted for 4-10 per cent of admissions to asylums, today due to antibiotic therapy fully developed forms of General Paresis have become rare while the atypical forms are on the increase (BMJ, 1978). In Hooshmand et al. (1972) series of 241 patients only 5 per cent had the typical picture of general paresis, in the rest the diagnosis was made after investigations when suspicion was aroused by neurological findings, emphasising the importance of routine serology.

Though rarely seen today, affective symptoms in general paresis are well documented and are sometimes the sole manifestation. Hahn (1959) in his series obtained a figure of 18, 60 and 20 per cent for manic, dementic and depressive forms respectively. Other studies report that the manic form is seen only in about 10 per cent of cases (Dewhurst, 1969; Binder and Dickman, 1980; Mapelli and Bel-

lelli, 1982). However Verma (1952) from India reported manic symptoms in 58 per cent of his patients while Liu (1960) from China reported them in 72 per cent. This shows that there may be geographical variations in symptomatology. The other forms reported are the schizophrenic, the taboparetic, the neuroasthenic, the acute organic and Korsakoff's psychosis (Lishman, 1987).

In the present case, affective symptoms first mania followed by depression, developed into a dementic picture. Though unusual, the physical signs were absent even when the mental changes were conspicuous and developed later (Walton, 1985). The mental changes along with the neurological and cardiovascular abnormalities led to a diagnosis of Tertiary Syphilis which was confirmed by detailed investigations. The CSF VDRL which was initially negative became positive on follow-up which could be explained by the well known 'Prozone Phenomenon' (Schmidt and Gonyea, 1980). After adequate therapy the patient showed significant improvement, both clinically and on psychometry. This is consistent with reports that early diagnosis and treatment arrests the course of dementia in 75 per cent of patients, with eventual symptomatic cure in two thirds of cases (Schmidt and Gonyea, 1980).

In conclusion, the course of manifestations and its response to treatment is sufficient to show that a manic-depressive picture could be an initial presentation of Neurosyphilis and should be kept in mind by clinicians, especially in patients with late onset mania.

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