

# General paresis of insane: a diagnostic dilemma.

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index of both diagnosis, and therapeutic response could not be done.

## Introduction

Syphilitic infection of the nervous system has shown a tremendous decline in this century with an attenuated and atypical presentation which lead to the diagnostic problem (1). General paresis of insane (GPI), the quarternary stage of this neurosyphilis is no exception. The classical presentation of Argyle-Robertson-pupil, dysarthria and tremor are rare nowadays and the illness can present with virtually any form of psychiatric problems either alone or preceding the onset of physical signs. Such atypical case without any obvious physical signs where the diagnostic difficulty was further compounded by the prevailing cultural belief system is presented here.

## Case report

Mr MB is a 70-year old paddy planter from Southern Thailand. He presented with 4 years history of gradually progressive behavioral disturbance characterized by irritability, social withdrawal, sleep disturbance and suspiciousness of being harmed. He also had forgetfulness, difficulty in remembering name, inability to find his way home and unable to recognize family members. Mental Status Examination (MSE) revealed persecutory delusion, labile affect, impairment in orientation, recent memory, intellectual functioning, judgment and insight. Physical examination revealed bilateral coarse tremor of hand, arcus senilis, immature cataract, diminished hearing but no sensory, motor or cranial nerve deficits.

Investigations were essentially normal expect raised eritrocyte sedimentation rate (34 mm, AEFT), positive VDRL (1 in 8 dilution) and positive TPHA (1:320). His wife was also found to be sero-positive for VDRL & TPHA and she was also treated. The two differential diagnosis considered were GPI and Dementia associated with sexually transmitted disease. The patient denied of having extra-marital sexual activity and also refused to give consent for lumbar puncture. He was started with procaine penicillin 2.4 mega units and haloperidol 5mg daily. He improved remarkably and the psychotic symptoms disappeared on the day of discharge. However he defaulted follow up and the serial cognitive assessments which could have been an

## Discussion

General paresis is by far the rare neurosyphilis in current psychiatric practice. The diagnosis is most often missed because of the insidious behavioral changes that proceeds the onset of actual clinical presentation. The above case presented with behavioral abnormality much before the onset of other clinical signs. The paranoid schizophrenia like profile as presented by this patient was rare in the existing literature (1). However the feature of dementia as evidence in Mr MB was a common presentation of G.P.I. (2).

The common triad of pupillary abnormality, tremor and sartharia was not evident in this case and only one component of the triad present. This might be either due to the absence of neurological finding in such cases with prominent behaviour symptom or due to the increasingly rare occurrence of these typical physical signs (3). The frequency of bilateral course tremor as seen in our case is approximately 70% (1). This isolated sign by itself is not sufficient for a diagnosis of GPI but when present in conjunction with dementia and positive VDRL and TPHA in blood and/or cerebrospinal fluid (CSF), it has a high dignostic specifcity.

The diagnostic problem was further complicated by the patient refusal to give consent for lumber puncture (L.P) due to a widely held cultural belief that L.P drains the person's energy and vital fluid that will eventually lead to his death. Hence the alternative to CSF examination such as blood VDRL and TPHA are the best substitutes in this setup. Fortunately, one of the Hooshmand et al's (3) International Criteria for dignosis of neurosyphilis confirms that a firm dignosis can be made when the blood Fluorescent Treponemal Antibody Test-in the form of absorption test or TPHA is positive and the presence of ocular or neurological findings suggestive of neurosyphilis. Thus, the diagnosis of GPI in our case is confirmed based on this criteria. Hooshmand et al's criteria is specially relevant to our local set up where LP is a taboo and a diagnosis of GPI as believed by certain people to be impossible without a CSF examination.

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