

## A REPORT OF SUBCLINICAL PSYCHOLOGICAL DETERIORATION (A TYPE OF ALCOHOLIC DEMENTIA)

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### SUMMARY

Alcoholics could present with various degrees of deterioration of cognitive functioning. The sub-clinical psychological deterioration had been one of the least recognized entities. This condition could be reversed or atleast arrested with treatment. The application of the term alcoholic dementia happened to be a misnomer for the clinical entity. A case of subclinical psychological deterioration that improved with treatment has been described here.

In the recent past the description of cognitive deficits in chronic alcoholics had led to a revision of the concept of alcoholic dementia. There had been a general tendency to label any demented alcoholic as suffering from Korsakoff's psychosis (Horvath, 1975). Of late, it had been realized that the psychological deterioration in chronic alcoholics is understandable in quantitative rather than qualitative terms (Cutting, 1978). And the magnitude of impairment had been related to the length of the drinking history (Jones & Parsons, 1971; Tarter, 1973). The 'subclinical' psychological deterioration' characterised by the deficits in certain spheres of intellect other than memory had been presumed/to be insidious in onset with a favourable outcome to treatment by thiamine. The present report would be the first of its kind from India.

### CASE REPORT

Mr. G. G., a 42 years old School Teacher coming from a high socio-economic background was admitted to NIMHANS on 8.11.1982 for being abusive and assaultive on an intoxication of five years duration and excessive drinking for 11 years. There was no family history of psychiatric disorders. He is married

for past 10 years and had one son. The interpersonal relationship with wife had been disturbed because of his alcoholism.

Initially he started drinking as a social drinker 17 years ago, consuming about 150-250 ml. of whisky almost every evening. After marriage his wife desired that he should discontinue drinking, which led to quarrels at home. Subsequently he increased his consumption of alcohol to 600 ml. of whisky per day. In a course of five years he had gradually increased consumption to 1200 ml. of whisky per day. In a state of intoxication he would quarrel with his wife and on occasions, would physically assault her. Otherwise he maintained cordial relationships with others. There was no history of blackouts, convulsions, and other withdrawal features. The mental status examination at the time of admission did not show any-features suggestive of psychoses or neuroses. His cognitive functions such as attention, concentration and memory were intact but he failed to perform simple calculations. He did not exhibit any other evidence of dysphasias agnosias, and apraxias. There was impairment of abstract thinking. He was motivated to give up drinking. Hence he was admitted.

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Following admission to the great surprise of investigators, he did not show any withdrawal features on abstinence.

#### INVESTIGATIONS

Haemogram, urine analyses, blood urea, blood sugar, blood cholesterol, C.S.F. analysis. X-ray skull, and serum electrolytes were normal. X-ray chest showed bilateral tuberculous lesions of lungs and he was put on appropriate anti-tuberculous regime.

A detailed neuropsychological valuation by the neuropsychologist showed bilateral frontal and parietal lobe involvement with no temporal lobe dysfunction or dementing features. Patient's abstract reasoning was moderately affected. Affect was one of indifference to the tests. Perceptual organization and spatial relationships were impaired. No dysphasia, agraphia or finger agnosia could be detected. There was evidence of dyscalculia and he exhibited no memory loss on P. G. I. Memory Scale.

A C T SCAN showed widened basal cisterns, sylvian fissure, cortical sulci and dilated ventricles. Lacunar infarcts were present in both fronto-polar regions. The features were suggestive of cerebral atrophy with fronto-polar lacunar infarcts.

#### TREATMENT

Patient was put on oral thiamine hydrochloride 100 mgs t.i.d. and tablet B Complex 1 t.i.d. After 3 weeks patient had recovered from his deficits and was discharged.

#### DISCUSSION

The subclinical psychological deterioration as had been described is a type of cognitive dysfunction in Alcoholics which would not always be clinically apparent and might only be deduced on psychological test (Brewer and Perret, 1971; Jones and Parsons, 1971; Tarter, 1973). It was

considered to be a variant of alcoholic dementia (Cutting, 1978). The word "Dementia" seemed to be a misnomer for this entity but for want of a better term had been retained. It should be emphasized that it was totally different from the global nature of deficits and poor prognosis of alcoholic dementia. This concept of sub-clinical psychological deterioration had gained acceptance due to demonstrable cognitive impairments in different degrees in chronic alcoholics without any clinical evidence of dementia. None of the workers had shown any direct relationships to the brain damage. However, the evidence that chronic alcoholic consumption could result in brain damage was suggested by Jones and Parsons (1971)

In this category the symptoms were of insidious onset and partially reversible with prolonged abstinence (Clarke and Haughton, 1975). It had been associated with a history of severe drinking or more than 10 years duration. The psychological impairments that had been described in the literature were; poor abstractibility (Page and Linden, 1974), impairment of frontal lobe functions (Ron, 1977) and deficit in perception and memory for non-verbal stimuli (Gregson and Taylor, 1977).

In the present case there was only impairment of abstract thinking, calculations, perceptual organizations and spatial relationships. It had been suggested by pneumo-encephalography and autopsy that, the lesions were mainly confined to the frontal lobes (Haug, 1968). In the present study the C. T. SCAN showed gross cerebral atrophy in contrast to the mild cognitive deficits. The treatment of such-sub-clinical psychological deterioration type had not been properly documented in the literature, however the partial reversibility and arrest of further progress were of clinical significance. In view of gross cerebral atrophy, the authors are of the opinion that the term alcoholic demen-

tia should still be used in this variety of cases.

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