ORIGI NAL A RTICLE

Follow-up study of alcoholic hallucinosis

BOJIR PERME, R.CHANDRASEKHARAN, KOMMU JOHN VIJAYSAGAR

ABSTRACT

Alcoholic hallucinosis is a pathological mental state characterized by an acute onset of predominant auditory hallucinations that occur either during or after a period of heavy alcohol consumption. In this study, 52 patients with a diagnosis of Psychotic disorder predominantly hallucinatory associated with alcohol use (F 10.52) were evaluated after a period of three years. Past history of withdrawal hallucinations was associated with alcoholic hallucinosis. The study has found a wide spectrum of outcome confirming the earlier observations that alcoholic hallucinosis is a heterogeneous disorder.

Key words: alcohol, hallucinosis, follow-up, abstinence

INTRODUCTION

The phenomenon of Hallucinatory psychosis in chronic alcohol users gathered considerable attention but did not gain recognition as a diagnosis. Bleuler (1916) termed the syndrome as alcoholic hallucinosis. According to ICD-9 this syndrome may occur in clear consciousness after withdrawal from alcohol. However it can appear in a patient who is still drinking. The voices give commands to do things against the subjects will. Secondary delusions especially of persecutory type may develop. In ICD-10, alcoholic hallucinosis has been relabeled as a psychotic disorder, predominantly hallucinatory type (P10.52).

Differential diagnosis of alcoholic hallucinosis includes alcohol withdrawal delirium, schizophrenia especially paranoid type, late onset psychotic disorder and organic mental disorder (Soyka,1993). Alcoholic hallucinosis is different from delirium tremens and presents mainly with auditory hallucination that persist after a person has recovered from symptoms of alcohol withdrawal and is no longer drinking. Doubts have been raised whether the two conditions can be differentiated based on 'auditory hallucinations and level of sensorium. (Glass, 1989) hallucinations in alcoholic hallucinosis can resemble to a great extent the auditory hallucinations of schizophrenia (Ghazi et al, 1986). Some believe that alcoholic hallucinosis is schizophrenia with secondary alcoholism or a latent form of schizophrenia (Glass, 1989). Tsuang et al (1994) has described the clinical characteristic of primary alcoholic with alcohol hallucinosis. They are younger at the onset of alcohol problems, consume more alcohol per occasion, show high level of drug experimentation and develop more alcohol related life problems.

Follow up studies play a crucial role in eliciting information (in the long-term prognosis of alcoholic hallucinosis and in delineating the syndrome from other conditions. Three follow up studies found that the outcome of the syndrome were varied and draw attention to the possibility of heterogeneous condition (Benedetti, 1952 Scott,1967 and Cutting,1978). Victor & Hope (1958) described benign transient form and chronic form of the hallucinosis and concluded that repeated attacks of acute auditory hallucinosis rendered the patients vulnerable to the development of chronic form of illness. Though various pathophysiological mechanisms were explored, the role of them remains unclear (Soyka, 1995). These poorly defined characteristics of alcoholic hallucinosis need more studies to validate the syndrome. In Indian context, there is a big lacuna in this area. This study was undertaken to determine the outcome in a group of cases diagnosed as alcoholic hallucinosis (F 10.52) during the years 1999 and 2000.

METHODOLOGY

The study was conducted in the Deaddiction clinic attached to the department of Psychiatry, Jawaharlal Institute of Postgraduate Medical Education and Research. The deaddiction department maintains exhaustive case records of patients, who attend the outpatient clinic for problems related to alcohol use. In the first phase of the study, cases diagnosed as Psychotic disorder, predominantly hallucinatory, associated with alcohol use (F 10.52) were identified. To avoid inclusion of doubtful cases the records were scrutinized by two psychiatrists. Delirium, co-morbid psychiatric disorder and substance use disorder other than alcohol were excluded from the study. In all 70 cases were identified. A specially prepared proforma was used to transfer the following information from the case sheet sociodemographic factors, family history of psychiatric illness, family history of alcohol use, past history of withdrawal hallucinations, alcohol related medical problems. Baseline scores on Severity of Alcohol Dependence Data Questionnaire (SADDQ) (Raisertek et al, 1983) and Alcohol problem questionnaire (Drummond, 1990), available in all the records, were noted. Subsequently a letter was sent to the patients requesting them to come with a key relative and contact one of the authors at Jipmer outpatient clinic. A second letter followed in case of response.

The patients and their key relatives were examined by one of the authors using direct interview method. Details about alcohol use, hallucinatory experiences if any and treatment details were recorded. The key relative was also separately interviewed to confirm the clinical status.

RESULTS

Majority 74.1% of 70 cases responded to the call letters. Eighteen of the call letters
were returned undelivered possibly, due to change in addresses. The mean age of the subjects was 38.6 ± 6.9 years. The mean age of onset of alcohol use was 22.6 ± 5.6 years. The mean duration of alcohol use was 15 9±6.6 years and the mean amount of daily alcohol consumption was 353.5 gms. Forty Nine (94.27%) were married and 31(59.67%) were employed. (69.27%) had family history of psychosis.

Table 1 shows four groups of patients based on hallucinations and alcohol use a) no hallucinations while maintaining abstinence 29(55.8%), (b) no hallucinations though continuing alcohol 11(21.2%), c) hallucinations in spite of abstinence 7 (13.5%), d) hallucinations with continued alcohol use 5(9.5%). Thirty five (69.3%) had abstained from alcohol while 17(32.7%) continued to use alcohol at the end of three years.

**TABLE 1 : Hallucinations and alcohol use during follow up evaluation (n 52)**

| Hallucinations and Alcohol Use | n 52 |
|--------------------------------|------|
| No Hallucinations while maintaining abstinence | 29 (55.8%) |
| No Hallucinations though continuing alcohol | 11 (21.2%) |
| Hallucinations in spite of abstinence | 7 (13.5%) |
| Hallucinations with continued alcohol use | 5 (9.5%) |

Table 2 shows the relationship between hallucinations on follow up and the variables such as family history of alcoholism, past history of hallucinations, family history of psychiatric illness, past history of treatment and abstinence. Only past history of hallucinosis showed statistically significant association with the hallucinations at follow up.

**DISCUSSION**

Table 2 shows the relationship between hallucinations on follow up and the variables such as family history of alcoholism, past history of hallucinations, family history of psychiatric illness, past history of treatment and abstinence. Only past history of hallucinosis showed statistically significant association with the hallucinations at follow up.

Age of onset of alcohol use, amount of daily alcohol intake, severity of alcohol dependence and alcohol related problems did not have significant association with hallucinations at follow up.

Some interesting findings have emerged from the study. A little more than 50% of patients who abstained from alcohol were free from hallucinations. This suggests that alcohol may be the offending agent in a subset of alcoholic patients who develop hallucinations. 21.2% of patients appeared resistant to relapse even while drinking. An earlier study by Benedetti (1952) observed a similar outcome. 13.5% of the patients continued to hallucinate despite abstinence. In this group none required a revision of diagnosis to schizophrenia or affective disorder. This has been challenged in other followup studies, which showed 5-11% of the sample, were diagnosed to suffer from schizophrenia. Our findings indirectly support the view that alcohol may have a direct effect on the brain resulting in brain dysfunction and may lead on to chronic hallucinatory state.

The age of onset of alcohol use, amount of alcohol use, family history of alcoholism, and past history of abstinence did not seem to have any association with hallucinations at follow up. Those who persisted with hallucinations at the end of three years did not show higher prevalence of psychosis in the family; Schukit (1982) in a review of 220 alcoholics with psychotic symptoms found no association between psychotic symptoms and family history of schizophrenia. The baseline scores of severity of alcohol dependence could not distinguish the groups with and without hallucinations. Glass (1989) while reviewing contribution of methodologies in understanding alcoholic hallucinosis has observed that the relationship between severity of dependence and alcoholic hallucinosis is not a robust one.

The only finding that was consistent and significant was past history of withdrawal hallucinations. Previous episode of hallucinosis may render the patients vulnerable to the development of chronic hallucinosis and is consistent with earlier study (Victor & Hope, 1958). It may probably be explained by the kindling mechanism by alcohol in the brain that predispose to development of hallucinations.

The study has found a wide spectrum of outcome confirming the earlier observations that alcoholic hallucinosis is a heterogeneous disorder. The precise relationship between alcoholic hallucinosis and abuse or alcohol could not be clearly established. Though abstinence leads to remission, few
appeared to be resistant to relapse though they continued to drink. In another small and significant group the hallucinations persisted despite abstinence. The inherent limitations of the study restrict the generalization of the findings. The sample was hospital based and it is likely that more severely dependent patients might have been recruited. On assessment during the third year, no means were employed to confirm use or abstinence of alcohol. No controls were included in the study. More follow-up studies at community level are needed to confirm the heterogeneity of the syndrome of alcoholic hallucinosis.

REFERENCES

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders, fourth Ed. Washington, D.C. American Psychiatric Association.

Benedetti, G. (1952) Die Alkohol hallucinosen (Stuttgart Thieme).

Bleuler, E. (1916) Textbook of psychiatry [Trans. by A.A. Brill] (New York. Macmillan).

Cutting, J. (1978) A re-appraisal of alcoholic psychoses. Psychological Medicine. 8. 285-295.

Drummond, C.D. (1990). The relationship between alcohol dependence and alcohol related problems in a clinical population. British Journal of Addiction, 85,337-366.

Ghazi, A and Bruce, S. (1986). Hallucinations: Theoretical and Clinical Overview. American journal of Psychiatry, 143. 1088-1097.

Glass, I.B. (1989a) Alcohol hallucinosis: a psychiatric enigma, the development of an idea. British Journal of Addiction, 84, 29-41.

Glass, I.B. (1989b) Alcohol Hallucinosis: a psychiatric enigma-2. follow up studies. British journal of Addiction, 84, 151-164.

Tsuang, J.W, Irwin, M.R., Smith.T.L, & Schuckit M.R. (1994) Characteristics of men with alcoholic hallucinosis. Addiction, 84, 73-78.

Raistrick, D., Dunbar, G., Davidson, R. (1983) Development of questionnaire to measure alcohol dependence. British Journal of Psychiatry, 78, 89-95.

Schuckit, M.A. & Winokur, G. (1971). Alcoholic Hallucinosis and schizophrenia: a negative study. British Journal of Psychiatry. 119. 549-550.

Schuckit, M.A. (1982) The history of psychotic symptoms in alcoholics. Journal of Clinical Psychiatry. 43. 53-57.

Scott, D.F. (1967) Alcoholic Hallucinosis: An Aetiological study. British Journal of Addiction, 62, 113-125.

Soyka, M. (1993) Psychopathological characteristics in alcohol hallucinosis and paranoid schizophrenia. Acta Psychiatrica Scandinavica, 81. 255-259.

Soyka, N. (1995) Psychophysiological mechanisms possibly involved in the development of alcohol hallucinosis. (Letters to Editor). Addiction, 90, 289-290.

Victor, M. & Hope, J.M. (1958). The phenomenon of auditory hallucinations in chronic alcoholism. A critical evaluation of the status of alcoholic hallucinosis. Journal of Nervous and Mental Disease. 126. 451-461.

World Health Organization (1992) The ICD10 classification of mental and behavioral disorders, clinical description and diagnostic guidelines (Geneva, WHO).