

## ALCOHOLIC HALLUCINOSIS AND PARANOID SCHIZOPHRENIA—A COMPARATIVE (CLINICAL AND FOLLOW UP) STUDY

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### SUMMARY

In a study of 36 patients of Alcoholic Hallucinosiis and 30 patients of Paranoid Schizophrenia, it was found that delusions, delusions of infidelity, third person and running commentary auditory hallucinations and insight were not different in the two groups.

Delusions of grandeur, passivity, thought echo and thought broadcast were significantly more frequent in paranoid schizophrenic patients. Anxiety, visual hallucinations and hallucinations in more than one modality at the same time were commoner in alcoholic hallucinosiis. Recovery from acute symptoms was much earlier in alcoholic hallucinosiis.

Number of first degree relatives with schizophrenia was much higher in the paranoid schizophrenic group.

In a mean follow up period of 18 months, it was found that patients with alcoholic hallucinosiis did much better than patients with paranoid schizophrenia.

Psychotic states in alcoholics have been known for long. The ICD-9 recognizes their classification into delirium tremens, alcoholic hallucinosiis and alcoholic paranoia. Delirium tremens being characterised by an alteration in the level of consciousness and autonomic instability is sufficiently delineated; the clinical profiles of alcoholic hallucinosiis and alcoholic paranoia, however, remain unclarified. Clinically alcoholic hallucinosiis and schizophrenia were considered indistinguishable by many (May and Ebaugh, 1953). Chafetz (1975) claimed that many patients later became schizophrenic. However, Slater and Roth (1977) state that in the light of available evidence, alcoholic hallucinosiis is a symptomatic psychosis resembling schizophrenia.

Schulkit and Winokur (1971) found that the incidence of schizophrenia in the relatives of patients with alcoholic hallucinosiis was no higher than in the general population. Of the types of schizophrenia, alcoholic hallucinosiis resembles paranoid schizophrenia most in view of the hallucinations of persecutory content and delusions.

The duration of alcoholic hallucinosiis as per ICD-9 (WHO 1977) is less than 6 months; Slater and Roth (1977) imply a protracted course; Forrest (1973) mentions that it lasts for months and Parry (1973) states that alcoholic hallucinosiis subsides spontaneously in a few weeks and rarely continues for over 12 months. It is thus evident that the duration of alcoholic hallucinosiis is uncertain.

The aim of this study was to determine if there was indeed a close resemblance between alcoholic hallucinosiis and paranoid schizophrenia with respect to symptomatology, treatment outcome and family history of schizophrenia.

### MATERIAL AND METHOD

The work was carried out at NIMHANS, Bangalore from January 1977 to September 1978.

30 patients diagnosed as alcoholic hallucinosiis as per ICD-8 criteria (ICD-9 criteria are identical) formed one group. This included patients with delusions consistent with hallucinations as the ICD does not state if presence of delusions precludes a

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diagnosis of alcoholic hallucinosis.

30 patients diagnosed as paranoid schizophrenia without alcoholism and with age and sex matched, formed the other group. To obviate confusion, all patients chosen had a duration of illness of less than 6 months. As the ICD glossary does not give inclusion or exclusion criteria for paranoid schizophrenia; we used the following criteria: Patients who had stable delusional systems with either hallucinations or formal thought disorder or both, without features that could entail their classification as affective or organic psychosis.

The aim being to take an uncontaminated sample of patients with alcoholic hallucinosis, those with confusion (except of the mildest degree) were deleted as this could bring in the possibility of other organic psychoses like delirium tremens, Korsakoff's psychosis, etc.

The patients were interviewed on the lines of the schedule for mental status examination given by Slater and Roth (1977). Each patient was examined by at least 2 investigators and a symptom was considered to be present only if there was unanimity of opinion as to its presence.

Insight was rated from 0 to 3 according to the method described by Wing *et al.* (1974). It was considered to be present if the score was 0 or 1 and absent if 2 or 3.

Family history of Schizophrenia for first degree relatives of the patient was obtained from at least 2 of the family members. History of schizophrenia was considered to be present if (a) the relative had a schizophrenic attack and had been treated for the same (psychiatric diagnosis available), (b) one of the family members had history of continuous mental illness suggestive of schizophrenia as indicated by evidence of decompensation in at least 3 of these five areas: thought, perception, mood, conduct, and personality. (These criteria were adopted from ICD-8). We felt that these criteria would be reasonably

sufficient as we limited our investigations to first degree relatives.

The patients in the acute phase were treated with either Chlorpromazine or Trifluoperazine, the dosage ranging from 400 to 1200 mg of Chlorpromazine equivalent (calculated from Davis, 1976). The dose range was adjusted on the guide lines given by Lehman (1975).

The patients were seen at least twice weekly while in the hospital. During follow up (mean period 18.3 months  $\pm$  1.850 months for patients of alcoholic hallucinations; mean period 18.57 months  $\pm$  1.764 months for patients with paranoid schizophrenia) the patients were examined at the end of 2 and 4 weeks after discharge, later at monthly intervals for 3 months, and once every 2 months thereafter. The patients who were receiving free drugs were seen regularly at 2 week intervals.

The patients were on medication throughout follow up; the dose range was 300 to 1000 mg of Chlorpromazine equivalent. The dose was adjusted for control of symptoms. Maintenance medication being an area of trial and error, (Lehman, 1975) we ensured that the dosage was always more than adequate.

The two groups were statistically compared with respect to symptomatology, course, outcome, and genetic history.

## RESULTS

Delusions, delusions of infidelity and of persecution do not differentiate paranoid schizophrenia from alcoholic hallucinosis. Delusions of grandeur and passivity feelings are significantly more in paranoid schizophrenics.

Visual hallucinosis and hallucinations is more than one modality at a time are commoner in alcoholic hallucinosis. Third person hallucinations, running commentary hallucinations do not differentiate the two entities. Thought echo is commoner in schizophrenia as also thought broadcast.

The number of patients with insight was not different in the two groups, nor was the insight ratings significantly different, although 'the mean insight rating' was higher in patients with alcoholic hallucinosis.

TABLE 1

| Symptoms                                | Symptomatology | Present   | Absent    | Significance |
|---|----------------|-----------|-----------|--------------|
| 1. Delusions                            | AH             | 29        | 1         | N.S.         |
|   | PS             | 30        | 0         |              |
| 2. Delusion of Infidelity               | AH             | 17        | 13        | N.S.         |
|   | PS             | 19        | 11        |              |
| 3. Delusions of Grandeur                | AH             | 3         | 27        | p<0.01       |
|   | PS             | 14        | 16        |              |
| 4. Delusions of persecution             | AH             | 22        | 8         | N.S.         |
|   | PS             | 24        | 6         |              |
| 5. Passivity feelings                   | AH             | 3         | 27        | p<0.02       |
|   | PS             | 12        | 18        |              |
| 6. No. of patients with hallucinosis    | AH             | 30        | 0         | N.S.         |
|   | PS             | 27        | 3         |              |
| 7. Thought Broadcast                    | AH             | 3         | 27        | p<0.01       |
|   | PS             | 14        | 16        |              |
| 8. Thought Echo                         | AH             | 5         | 25        | p<0.05       |
|   | PS             | 12        | 18        |              |
| 9. Auditory Hallucinations              | AH             | 22        | 8         | N.S.         |
|   | PS             | 21        | 9         |              |
| 10. Third person Hallucinations         | AH             | 16        | 14        | N.S.         |
|   | PS             | 22        | 8         |              |
| 11. Running Commentary Hallucinations   | AH             | 14        | 16        | N.S.         |
|   | PS             | 18        | 12        |              |
| 12. Visual Hallucination                | AH             | 15        | 15        | p<0.05       |
|   | PS             | 6         | 24        |              |
| 13. Insight                             | AH             | 10        | 20        | N.S.         |
|   | PS             | 8         | 22        |              |
| 13A. Insight 'Scores'                   | AH             | Mean =1.7 | S.D.=0.63 | N.S.         |
|   | PS             | Mean =2.0 | S.D.=0.55 |              |
|   |                | t=1.51    | d.f.=58   |              |
|   |                |           |           |              |
| 14. No. of Modalities of Hallucinations | AH             | 16        | 14        | p<0.05       |
|   | PS             | 24        | 6         |              |

Anxiety was commoner in patients with alcoholic hallucinosis. Depression, elation, irritability and blunting of emotions were not different in the two groups. Suicidal ideation was present in 6 patients with alcoholic hallucinosis (1 attempted suicide) and in 4 patients with paranoid schizophrenia (1 attempted suicide).

TABLE 2

|                             | Affect | AH | PS |
|-----------------------------|--------|----|----|
| Anxious                     | ..     | 13 | 9  |
| Depressed                   | ..     | 11 | 9  |
| Elation                     | ..     | 0  | 2  |
| Blunting                    | ..     | 1  | 5  |
| Irritability                | ..     | 5  | 5  |
| $X^2=6.93$ , d.f.=2, p<.05. |        |    |    |

Recovery from acute symptoms was defined as—(a) absence of symptoms such as anxiety, agitation and hallucinations, (b) where delusions are present they are not acted upon by the patient, and do not interfere with day to day activity, (c) normal sleep with medication for at least five days before discharge.

Both schizophrenic patients and patients with alcoholic hallucinosis recover from acute symptoms as per this definition. Recovery from acute symptoms was significantly earlier in alcoholic hallucinosis.

TABLE 3—Time taken for recovery from acute symptoms

|                         | Mean No. of days | S.D.   | t       |
|-------------------------|------------------|--------|---------|
| Alcoholic Hallucinosiis | 14.4             | ± 8.36 | t=4.76  |
| Paranoid schizophrenia  | 38.22            | ±26.70 | p<0.001 |

By 'outcome' we mean the status of the patient after discharge, during follow up. A "good" outcome was defined as total absence of disturbing symptoms, resumption of premorbid level of occupational and

social functioning. Continued alcohol intake in alcoholics did not preclude their inclusion in this category. "Moderate outcome" was defined as the presence of some symptoms not very disturbing but fair social and work functioning. Poor outcome meant the persistence of symptoms or frequent relapses even with continued medication preventing social and occupational functioning to the satisfaction of the patient's attendant. 'Outcome' in alcoholic hallucinosis was significantly better than in paranoid schizophrenia.

TABLE 4—'Outcome' in alcoholic hallucinosis and paranoid schizophrenia

|                           | Good | Moderate | Poor       |
|---------------------------|------|----------|------------|
| Alcoholic hallucinosis .. | 19   | 7        | 4          |
| Paranoid schizophrenia .. | 4    | 11       | 15 p<0.001 |

All patients with the alcoholic hallucinosis had been taking alcohol in varying amounts throughout the period of follow up. Only four of them had another attack of hallucinosis; none had more than one attack during this period.

There were significantly greater number of first degree relatives with schizophrenia for the group of patients with paranoid schizophrenia.

TABLE 5—Morbidity rise for Schizophrenia in First Degree Relatives of probands

|                           | No. of first degree Relatives | B.Z. | No. Ill | M.R. %     |
|---------------------------|-------------------------------|------|---------|------------|
| Alcoholic hallucinosis .. | 251                           | 102  | 2       | 1.96       |
| Paranoid Schizophrenia    | 207                           | 83   | 7       | 8.4 p<0.05 |

## DISCUSSION

Although Scott *et al.* (1969) did mention that patients with alcoholic hallucinosis were free from "formal thought disorder and other schizophrenic features," no attempt has till now been made to spell out differentiating points between alcoholic hallucinosis and paranoid schizophrenia (the type of schizophrenia alcoholic hallucinosis most closely resembles).

We have found that thought broadcast, feelings of passivity, delusions of grandeur and thought echo differentiate paranoid schizophrenia from alcoholic hallucinosis. Third person and running commentary auditory hallucination are not useful in their differentiation. Anxiety was commoner in patients with alcoholic hallucinosis. Blunting of affect was not found to be commoner in patients with schizophrenia possibly because the patients were acutely ill and in paranoid schizophrenia the personality is more intact than in other varieties.

Neither the number of patients with insight nor insight ratings were very different in the two groups. In fact, Victor and Hope (1958) also found insight only in a minority of patients with alcoholic hallucinosis.

Recovery from acute symptoms was much earlier in alcoholic hallucinosis than implied by Slater & Roth (1977) and Forrest (1973).

Among the outcome studies of alcoholic hallucinosis one of the most complete was that of Benedetti (1952), who followed up 113 cases of acute alcoholic hallucinosis. Out of these, 90 recovered within 6 months, 12 had schizophrenic deterioration and 10 had a progressive organic dementia. Victor and Hope (1958), in a study of 76 patients, found that 4 patients developed features of schizophrenia on follow up. In our study even though 4 out of 30 had poor social function, none had evidence of either schizophrenia or organic deterioration at follow up. Admittedly, our follow up was short.

There seems to be no genetic background for the belief that alcoholic hallucinosis and schizophrenia are different forms of the same illness.

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