LATE PARAPHRENIA
(A REPORT FROM THE GEROPSYCHIATRIC CLINIC, MADURAI, INDIA)

A. VENKOBIA RAO, M.D., Ph.D., D.Sc., D.P.M., F.A.M.S., F.R.C.Psych., F.A.P.A., M.R.A.N.Z.C.P.
T. MADHAVAN, M.B.B.S., D.P.M.

SUMMARY

A brief review of literature on Late Paraphrenia is offered. An analysis was made on 15 cases of late paraphrenia with reference to its frequency, sex distribution, hallucinations, delusions and sensory impairment. Late Paraphrenia formed 4% of all Geropsychiatry cases.

All the cases had hallucinations (100%) while 14 had delusions (93%). An associated auditory and/or visual defect was noticed in 13 of the cases (87%).

Follow up findings revealed a sustained remission for 4 to 5 years with drugs in 12 patients (75%) and one patient died from cerebral stroke.

Described by Kraepelin as the darkest chapter in Psychological Medicine, Psychiatry of Old age has now emerged as a sub specialty offering an improved outlook for the elderly. Anti-depressant and anti-manic drugs for affective disorders and pheno-thiazines and butyrophenones for schizophrenia-like syndromes and nootropics for cognitive failure have brightened the fate of Geropsychiatric patients. The Psycho-pharmacological revolution has not failed to benefit the mentally ill elders.

Paraphrenia, the so called ‘elderly aunt’ of schizophrenia along with manic depressive psychosis and dementia praecox were born out of Kraepelin’s (1921) classic work. He pioneered the division of mental disorders based on the characteristic clinical features, the course and outcome. Paraphrenia was separated as an entity owing to the “far slighter development of the disorders of emotion and volition and the inner harmony of the psychic life is considerably less involved”. The symptomatology in Paraphrenia is indubitably schizophrenic but the course, outcome and the genetic basis are known to differ from the latter. The deterioration rarely sets in and the incidence of schizophrenia in the family members is less than in the younger schizophrenic patients. A close association between Paraphrenia and sensory disabilities like hearing and visual impairment has been noticed. Bleuler (1943) observed that “schizophrenia-like” illnesses occurred in the elderly and estimated them to be around 5% amongst their illnesses. Roth (1955) introduced the term “Late Paraphrenia” to draw attention to the occurrence of paraphrenia in the late age and its distinctive aetiological and clinical picture. He reported the admixture of paranoidal delusions and the hallucinations with other schizophrenic symptoms and cautioned that these cases are liable to be mistaken for senile or arteriosclerotic psychosis. The classic work of Tomlinson et al. (1968) has indicated that quantitative neuropathological changes like senile plaques and cerebral softening are very much less than in Senile and multi-infarct dementias. Kay (1975) however, opines that chronic paranoid hallucinatory psychoses arising late in life are basically schizophrenias not only from the descriptive point of view but also in other respects such as heredity, previous personality, natural history, and response to...
treatment. The patients share features like low marriage and reproductive rates and a tendency to become isolated. The postponement of the illness to a later part of life is attributed by Kay to a weak hereditary predisposition, presence of non-specific favourable traits like vitality and aggressiveness and to the cumulative effects of multiple focal cerebral lesions. The importance of a correct diagnosis lies in the fact that the condition is generally mistaken either for dementia—a tragic mistake or depressive disorders. There is a paucity of reports on paraphrenia from developing countries. At present those aged sixty and above form nearly 3% of all attendance in the psychiatric clinic, Madurai (Venkoba Rao, 1979; 1981). Nearly 6-7% of the country's population is comprised by this age group. However during the next two decades, according to demographic projections, there will be nearly 600 million people in the world over sixty, of whom 350 will be in the countries defined as "economically poor" at present (WHO 1981). Hence the importance of Geropsychiatry in the years to come in the developing countries.

MATERIAL

This communication deals with the incidence, sex distribution, clinical features, associated sensory disabilities and follow up findings in fifteen cases of "Late Paraphrenia" encountered in the Geropsychiatry Clinic, Madurai Medical College, Govt. Rajaji Hospital, Madurai.

The Clinic: This special clinic, perhaps one of very few in developing countries, started in 1976 in the Institute of Psychiatry, Govt. Rajaji Hospital and Madurai Medical College, Madurai and has been oriented to service, teaching and research. All patients (N=374) aged sixty and above reporting at the main outpatient department during the period 1976-1981 of the Institute were registered additionally at this clinic. The clinic functions on Wednesdays and three beds out of a total of 30 are exclusively allotted in the wards for inpatient Psychogeriatric care. The material for the present study is drawn from this clinic. Fifteen cases were diagnosed as of "Late Paraphrenia." Inclusion criteria consisted of presence of delusions and/or hallucinations occurring for the first time at sixty years or over and the absence of affective disorders or cerebral disease of acute or chronic nature and intellectual deterioration. Excluded also are "graduate" cases, i.e., those in whom the illness started early in life but, have survived beyond 60 with symptoms. As an extension of this Geropsychiatric facility a community geriatric survey of elderly subjects has been in progress in Tiruppuvanam, about 18 kilometres from Madurai. The Institute team visits the community psychiatric centre on Sundays. This centre has been functioning from April 1981. One hundred and thirty patients aged 60 and above were examined and no case of Paraphrenia was seen.

OBSERVATIONS

The data in respect of 15 Late paraphrenia patients are discussed.

Frequency: Fifteen cases of paraphrenia out of 374 cases aged and sixty and above registered in Geropsychiatric clinic from 1976-1981 constitute 4% in the series. The reported occurrence of the condition has varied depending on the method employed. The well known population survey study in Newcastle (Kay et al., 1964) failed to detect any case of Late Paraphrenia. The Edinburgh study by Williamson et al. (1964) revealed two cases among 200 surveyed. On the other hand as against the community setting, the figures from hospital based studies offer a higher occurrence. Gibson (1961) found 10 cases among 100 admissions in Newcastle area, while Fish (1960) found 41 such cases among 264 admission in Edinburgh hospitals. In yet another survey, 28% were diagnosed among 150 old people by Woodside (1965). Recent
reports from Edinburgh indicate that there were only ten patients with the diagnosis of 'paranoid illness' among 2319 patients aged sixty and above into the Royal Edinburgh hospital during the year 1973 (Boyd, 1975). The Tiruppuvanam survey which included 130 persons reporting at the community centre revealed no case of Late Paraphrenia. However twenty cases of other psychiatric illness were detected with the psychiatric illness rate of 15% (Table I). The Late paraphrenia is rare and the discrepancy observed by us between the hospital based data and the community data tallies with the available reports in the literature.

**Table I—Diagnostic categories in the Community centre cases**

| Diagnosis                  | N=20 |
|----------------------------|------|
| 1. Depression              | 17   |
| 2. Anxiety state           | 2    |
| 3. Hysteria                | 1    |
| 4. Organic Brain syndrome  | Nil  |
| 5. Paraphrenia             | Nil  |

**Table II** offers the incidence of clinical categories encountered in the clinic.

**Table II—Diagnostic categories in the Geropsychiatric clinic cases**

| Diagnosis                  | (N=374) |
|----------------------------|---------|
| 1. Organic Brain syndrome  | 129     |
| Acute O.B.S.               | 55      |
| Dementia                   | 69      |
| Epilepsy                   | 4       |
| G.P.I.                     | 1       |
| 2. Affective disorders     | 160     |
| Depression                 | 90      |
| Mania                      | 62      |
| 3. Neuroses                | 35      |
| Anxiety states             | 20      |
| Hysteria                   | 8       |
| Hypochondrisis             | 7       |
| 4. Alcoholism              |         |
| 5. Schizophrenia (graduate cases) | 15 |
| 6. Paraphrenia             | 15      |
| 7. Nil Psychiatry          | 15      |

**Sex distribution:** Eight were females and seven males in the series. This is contrary to the statement made by Slater and Roth (1969) that late paraphrenia is generally confined to the females and accounts for 8-9% of all female admissions over the age of sixty.

**Hallucinations (N=15):** All patients had hallucinatory symptoms: Auditory, visual, tactile and olfactory in this order. The Tables III and IV offer respectively the details regarding the number of patients that suffered hallucinations and their content. Many had hallucinations in more than one modality; the combination of auditory and visual being common. The auditory hallucinations were of human voices in a clear state of consciousness (phonemes). Threatening voices occurred in five while they were commanding or conversing in four. In one the theme was of sex. In a solitary instance the voice was comforting the patient. In two the hallucinations were amorphous without being clear. The visual hallucinations occurred in seven patients. Tactile type was noticed in five. The tactile variety included: insects, frogs, worms crawling over the body and under the skin (Ekbom's syndrome).

**Table III—Types of hallucination (N=15)**

| Types of hallucination | N. |
|------------------------|----|
| 1. Auditory            | 11 |
| 2. Visual              | 7  |
| 3. Tactile             | 5  |
| 4. Olfactory           | 1  |

**Table IV—Content of hallucinations**

| Content of hallucinations | N. |
|---------------------------|----|
| 1. Conversing and commanding | 4  |
| 2. Threatening            | 5  |
| 3. Consoling              | 1  |
| 4. Abusing                | 1  |
| 5. Sexual                 | 1  |
| 6. Vague—'Amorphous' type | 2  |
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The patients were seen pulling them out from their hair and skin. In only one instance the hallucination was olfactory—the clothings and food, smelling of kerosene. In most instances the hallucinosis conformed to Schneider's First rank type and in two were without any significant content.

Delusions: (N=14): Delusions are known to be more or less organised and occurring in a setting of a well preserved personality and intellect in paraphrenia. Delusions marked the clinical picture in all but one case: Persecutory types in eight, of infestation in four, hypochondriacal, erotic and grandiose type in one each. Referential ideas were prominent in three patients besides the delusion. In eight cases, the behaviour was prompted by the delusion; four patients with delusions of infestation shaved their heads and body and exposed themselves to medicated smoke or applied chemicals. Those with persecutory delusions quarrelled with their family members and neighbours and complained to the police.

Table V—Types of delusions (N=15)

| Delusions                  | (N=15) |
|----------------------------|--------|
| 1. Persecutory             | 8      |
| 2. Delusion of being infested | 4    |
| 3. Sexual                  | 1      |
| 4. Hypochondriacal        | 1      |
| 5. Grandiose               | 1      |

Details of delusions: Mrs. E had sexual delusion, was convinced that her sister-in-law had sexual contact with another person and both of them poured semen into her (patient's) ears and that this led to people calling her for sexual relationship. The voices also threatened and abused the patient if she did not obey them. She was also deluded that her daughter plotted to kill her and she reacted by accusing the daughter and the neighbours. The contents of the persecutory delusions in other patients were as follows: A man comes out in the middle of the night and beats her over the chest. This patient kept awake throughout the night to avoid the assault. In another female patient, the delusion was that her son was trying to rob her of the property and with neighbour's help was trying to kill her. She reacted by repeatedly threatening the son. Another female patient had a delusion that her son-in-law and nephew were plotting to kill her and rob her of property. She also added that her daughter was the victim of persecution by him. She became agitated, restless, tearful, crying and beating her chest. A male patient had a persecutory delusion that a woman in the neighbourhood had illicit sexual relations with a Harijan man and earlier he had seen their act and hence both of them were chasing him (patient) and trying to put an end to him. The persecutors followed him wherever he went. They have also bribed the police to harass him. His relations have turned against him. This patient lodged a complaint with the police. Another woman had a delusion that her son and daughters were threatening to kill her. This patient was agitated over her delusion. Another woman said that the people in her village have branded her as immoral. They followed her wherever she went and stayed 2-3 doors away from her house. She repeatedly goes to neighbouring houses, shouts at her persecutors and returns.

Summarising, five of the patients with persecutory delusions complained about persecutors or picked up quarrels with them where as two of them started crying about and were agitated over this. It is interesting that out of the nine patients who had the persecutory delusions, eight were females, while all the patients who had delusions of being infested were males.

Sensory impairment: That hallucinations and delusions should result from perceptual deficiency or loss is not strange but the
consistency with which these are associated with paraphrenia is certainly striking. The reports from literature estimate that hearing loss occurs in 30 to 40 percent of cases (Post, 1966; Slater and Roth, 1969; Kay, 1975). Thirteen patients in the present series suffered sensory defect. Two were free from that. Four had hearing loss of varying intensity and three visual impairment. Six had both disabilities. The duration of sensory deficit ranged from two years to fifteen years prior to the onset of illness.

An association between deafness and paranoid schizophrenia was observed earlier by Houston and Royse (1954). Cooper (1974) found deafness preceding schizophrenia was not only more common in elderly patients but of much longer duration and more intense. The causes of deafness was different from the depressed patients of similar age. McClelland et al. (1966) and Herbert and Jacobson (1967) also noticed visual defects in elderly schizophrenics. Table VI offers data on the prevalence of sensory defects in late onset schizophrenias and affective disorders in late life from the published reports. It may be seen that in the present series the hearing loss (67%) and visual loss (60%) are far more frequent among the late paraphrenics than those with effective disorders in the same age group (6% and 28% respectively).

Follow up findings: The management essentially was by administration of Phenothiazine group of drugs (chloropromazines, Fluphenazine) and where necessary modified electroconvulsive treatment was also employed. The symptoms receded in all the fifteen cases within three to four weeks and a sustained remission was achieved in twelve of them (75% in the series). Discontinuance of the drug led to relapse in a few and remission was quickly gained with readministration of the drugs. Twelve are on continuous drugs for over a period varying from four-five years and are in remission. Two have been frequently defaulting drug taking with the symptoms recurring. A female died while in remission from cerebral stroke. No suicidal attempt was made by any case. The results of drug therapy
are reported by Post (1966). None developed any dementing features either degenerative or multi-infarct type. That life expectancy for late paraphrenics resembles that for normal population has been reported by Kay (1963). It has also been observed that a clear cut cause of death is established in these cases (Roth and Kay 1956). The response to pharmacotherapy and general prognosis for life and the clear cause of death in our series are in keeping with these reports.

DISCUSSION

The low frequency of late paraphrenia in the present series is akin to the reported findings in the literature referred to already. The clinical symptomatology essentially of delusions and hallucinations unrelated to cerebral diseases or affective illness, association with sensory defects and a good prognosis bears a remarkable resemblance to the description of the illness in the standard text books and reports by western authors. It also fits in with the old observation that the schizophrenia is an illness predominantly of youngsters while affective disorder affects the older age groups. These features tend to under emphasize the role of cultural factors in the formal presentation of late paraphrenia. Beyond influencing the content of delusions and hallucinations to a certain extent the cultural influence appears not operative.

The neurochemical changes in the ageing brain help to offer an explanation to the differential incidence of psychiatric disorders in the elderly. In the ageing brain there is a reduction of the biogenic amines and choline acetyl transferase. The reduction of amines in CNS predisposes to depressive illness and Parkinsonism, while CAT reduction leads to brain failure of intrinsic type with memory defect. These do not favour the occurrence of schizophrenia or schizophrenic-like syndromes since they are based on “hyper dopaminergic” state. This hypothesis of “hyper-dopaminergic” state has been advanced by Crow (1980). This at present is a conjecture and needs further work. There may be other factors that have not yet been discovered.

In view of the possible normal span of life, an improved outcome with psychopharmacological therapy, it is all the more necessary that late paraphrenia be recognised accurately instead of being doomed to the back wards of the hospital under the mistaken notion that “all that occurs in the aged is senile degeneration”.

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