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Outpatient Referrals to Psychiatry I: From Neurology - A Controlled Prospective Study

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Abstract

A controlled prospective study of the pattern of outpatient referrals from neurology to psychiatry was conducted. Forty-six patients were referred from neurology constituting 9% of total new cases and 54% of referred cases. When compared to control group these patients differed significantly in terms of their clinical presentation, mental status examination and psychiatric diagnosis. Majority of the referred patients presented with multiple somatic complaints, were found to be depressed and/or anxious, and were clinically diagnosed more often as neurosis.

Key words -
Referrals,
Neurology,
Psychiatry,
Liaison

The modern revival of neuropsychiatry is bringing psychiatry and neurology together again after a century of separation [1], [2] so much so that in future neuropsychiatry must form a major part of training of psychiatrists [3]. It is known that there is a high rate of psychiatric morbidity in neurology inpatients [4], [5], [6] and outpatients [6], [7]. Neurologic referrals frequently predominate in the work of a psychiatric consultation-liaison service [8], [9]. In an Indian study [10] neurology and neurosurgery referrals constituted 7% of the total outpatient referrals and 18% of total inpatient referrals in a general hospital set-up. Neuropsychiatric aspects of neurology patients referred to psychiatry have not been studied adequately. Most of the studies done on this aspect were retrospective in nature and were not controlled.

The present study was undertaken
(I) to examine the pattern of referrals from neurology outpatient to psychiatry outpatient in order to determine the referral rate, reasons for referrals and psychiatric problems in the referred cases, and
(ii) to compare the demographic, clinical and diagnostic characteristics of the referred cases with

randomly selected unreferred cases (control group).

Subjects and Materials

This study was conducted in the psychiatry outpatient department of National Institute of Mental Health & Neuro Sciences, Bangalore, India, which is a large teaching hospital with a number of clinical and basic neurosciences specialities. All consecutive new cases registered in the outpatient clinic were screened in the outpatient clinic for mode of referral. Data of patients referred from Neurology, Neurosurgery, other hospitals and physicians over a period of five months were recorded systematically. Socioidemographic details, reasons for referrals, presenting complaints and detailed psychiatric assessment which included symptomatology, duration of illness, psychiatric, neurological and medical examination, investigation (if any) treatment given, and mode of disposal were recorded. Clinical diagnosis was made as per ICD 9 [11].

The subjects for control group were selected randomly from the non-referred cases seen during the same period in the same clinic. All patients were evaluated by qualified psychiatrists. Data collected were subjected to statistical analysis to test the significance of differences between neurology referrals and the control group (Table I).

Table I - Comparison between neurology referrals and controls

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Results

In all, 518 new cases were registered at psychiatry outpaitent of one particular unit during the study period, out of which 85 (16%) patients were referred cases. Referrals were mainly from Neurology (54%, 46 patients), Neurosurgery (32%, 27 patients), and other hospitals (14%, 12 patients). In the present paper, the characteristics about the neurology referrals, which constituted 9% of total new cases and 54% of the referred patients, are described.

The patients referred from neurology were more often males (59%) below 35 years of age (70%), illiterate (56%), married (65%), from rural background (57%), from low socioeconomic status (63%) and form working class (50%). On comparison with the control group these were not statistically different. The mean age of the neurology referred cases were: for males 35.3 yrs, females 28.3 yrs and whole group 32.4 yrs. Mean age of control group subjects was: for males 32.9 yrs, for females 35.3 yrs and total group 33.8 yrs.

The commonest reasons for referral were suspected psychiatric complaints (70%), and absence of neurological findings (13%). 'Vague' somatic symptoms were the reasons for referral in 15% of the cases, though multiple somatic symptoms as chief complaintwere reported by 43%. Other presenting complaints were headache and fits each by 22% of the referred cases. As compared to controls multiple somatic complaints were significantly ($P<0.01$) more frequent in the referred cases (Table 1).

The duration of illness of the referred cases was less than six months in 37% and more than two years in 41% of cases. This was not different from the control group. Psychiatric examination revealed

symptoms of depression in 39% and anxiety in 26%. No prominent psychopathology was detected in 30% of the referred cases. Psychotic features and cognitive impairment were significantly less often ($P < 0.01$) noted in the index group as compared to the controls.

In 33% of the neurology referrals general physical examinations revealed features of various physical illnesses like anaemia, hypertension, peptic ucler, asthma etc., however this was not significantly different from the control group.

Significant differences ($P < 0.01$) were found in the psychiatric diagnoses between the neurology referrals and the controls (Table 1). Neurosis was diagnosed in 54% of neurology referrals compared to 19% in controls. Manic depressive psychosis was diagnosed in 22% of neurology referrals compared to 18% of controls. There were two cases of mental retardation. There were no cases of organic psychosis, dementia and schzophrenia in the neurology referrals.

Two of the referred cases were sent back to neurology after psychiatric evaluation. Majority of patients in both groups were treated on an outpatient basis with drugs and psychological methods. In 2% neurology patients and 10% of controls no psychiatric illness was detected.

Discussion

The likelihood of psychiatric problems in patients suffering form neurological and neurosurgical disorders in more as compared to the other specialities. The referrals from neurology to psychiatry in this study have been found to be nearly 9% of psychiatric cases, and 54% of all the referred cases. This magnitude indicates the importance of studying patterns of referrals from neurology to psychiatry in detial. The referred patients presented with multiple somatic complaints, headache, fits; were more often depressed and/or anxious, and neurotic illness were the commonest psychiatric diagnosis. Though there is high prevalence of psychiatric morbidity in the referred patients majority could be managed on an outpatient basis. It is difficult to compare our results with other studies most of which were conducted either in a general hospital [4], [5], [6], [7], [8], [10], [13] or in consultation liaison units [1]. In the previous studies done in India [12], [13] multiplesomatic complaints without demonstrable organic basis were the commonest clinical presentation in the general hospital psychiatric clinics and has been found to be common in non-European cultures [14], [15]. Headache was the commonest presenting symptom in many western studies [16], [17]. In the present study 22% of neurology referrals complained of headache. Another common presenting symptom in our patients was pseudoseizures as has also been reported by Schofield & Duane [1]. None of the patients in the present study had epilepsy with pseudoseizures. Though epilepsy is the commonest problem seen in neurology outpatients none of the cases referred to psychiatry had epilepsy with psychiatric problems.

Some symptoms necessitate referral to a neurologist more readily than others. Some are frightening to patient and others are more difficult to manage for the general practitioner or other specialists [7]. Patients with symptoms which are common in neurological illness e.g. headache and fits are more likely to consult a neurologist than psychiatrists. This may account for significantly high percentage of cases with the above symptoms consulting a neurologist first, but due to lack of detectable neurological cause, these patients were referred to psychiatry.

Relationship between the neurologists and other specialists also affect the pattern of referral. In the Schofield andDuane [1] study 53% of patients who had both neurological and psychiatric diagnosis and

43% of patients with psychiatric diagnosis alone presented with the functional neurological symptoms e.g. pain, pseudoseizures and parenthesis etc. In Schiffer's study [6] of neurology patients 42% of patients (12% of inpatients, 30% of outpatients) were sufficiently symptomatic to justify a DSM III diagnosis out of which 18% of inpatients and 18% of outpatients of neurology had primary psychiatric diagnosis. Twenty-five per cent of psychiatric patients (33% of inpatients and 22% of outpatients) had primary neurological illness with secondary psychiatry syndromes [6]. But in the present study, patients who had neurological illnesses associated with psychiatric problems were represented less in out clinic, reasons for which were not clear. There is a possibility that these patients were treated by their neurologists for their psychiatric manifestations. Lipowski and Kiriokos [18] reported that 52% of neurology hospital patients had no organic pathology compared to 33% in general hospital patients with similar findings. Schofield and Duane [1] noted that referred neurology patients were else likely to have organic pathology than those referred from other wards in general hospital.

There was a significant difference between the referred group and controls as regards psychiatric diagnosis. 54% of referred patients were diagnosed as neurosis and 22% as psychosis though none had schizophrenia. Majority of cases of neurosis presented to the neurologist with functional neurological symptoms. In the Schiffer [6] study of neurology patients most common psychiatric diagnoses were conversion disorders, anxiety disorders and somatoform disorders and very few psychotic patients as in the present study. Schofield and Duane [1] reported that 66% cases who presented with functional neurological symptoms were diagnosed as neuroses (36% depression, 18% hysteria, 10% anxiety, 2% others). Shevitz et al [8] found that 8% of their neurology referrals had a diagnosis of hysteria. We did not look at the correlation between presenting symptoms and psychiatric diagnosis mainly because a number of cases had more than one presenting complaint.

Finally, we consider that the possibilities of primary psychiatric problems in patients presenting with multiple somatic complaints, fits and headache is high in other specialities, like neurology and neurosurgery. A strong index of suspicion should always be exercised while dealing with such patients since these patients are at a great risk of developing iatrogenic problems. In the present study only one neurology referral patient had no psychiatric illness which highlights the sensitivity of neurologists in identifying psychiatric morbidity and referring for psychiatric help in their patients.

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