

Delirium at Nepal Medical College Teaching Hospital: reason for referral and subtypes

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ABSTRACT

The important neuropsychiatric disorder delirium is the most single important disorder in consultation liaison psychiatry. There is a dearth of study in delirium. The purpose of this study was to find out the demographic profile, reason for referral, and subtypes of delirium. Thirty two consecutive cases of delirium diagnosed by psychiatrist in consultation liaison psychiatry were enrolled in the study. This is a descriptive study and diagnoses were made based upon 'The International Classification of Disease (ICD-10)'. The majority of cases were from age 70 and above, male sex being more common and most commonest reason for referral being disturbed behavior. The hyperactive subtype of delirium was the frequent finding. Medicine and ICU followed by surgery and post operative ward were the most referring departments.

Keywords: Delirium, subtypes, referrals.

INTRODUCTION

Delirium is a cognitive disorder often characterized by acute onset, fluctuating course, altered sensorium and disturbances in orientation, memory, attention, thinking, perception and behavior.¹ Delirium is a syndrome, not a disease and it has many causes, all of which result in a similar pattern of signs and symptoms. It remains an underrecognized and underdiagnosed clinical disorder.² Delirium is a frequent cause of psychiatric consultation in the general hospital. There have been few studies in demographic profile, subtypes and reason for referral for delirium in Nepal.

MATERIALS AND METHODS

This is a descriptive study. The study population consists of all referral cases from various department of Nepal Medical College and Teaching Hospital, diagnosed as delirium by Psychiatrist using ICD10.³ The duration of study was from 2064/01/01 to 2064/05/30. Patient's

demographic data, source of referral, reason for referral were recorded in a proforma developed by the department of psychiatry. Diagnosed cases of delirium were then classified into subtypes using the Liptizin and Levkoff criteria.⁴

RESULTS

The total number of delirium during the study period was 32. The highest numbers of cases of delirium was seen in age group above 70(11), followed by age group between 61-70 years of age. The age group less than 40 showed least number of deliriums (Fig.1). There were 22 males and 10 females. Table-1 depicts the reason for referrals. Disturbed behavior was the commonest reason for psychiatric referral (30), followed by disorientation (29), irrelevant talk (28) and disturbed sleep (4). The highest number of referral was from medicine and ICU, and followed by Surgery and post operative ward (Fig.2). The hyperactive delirium was most frequently diagnosed in our study (25), followed by mixed (5) and hypoactive subtypes (2) (Fig.3).

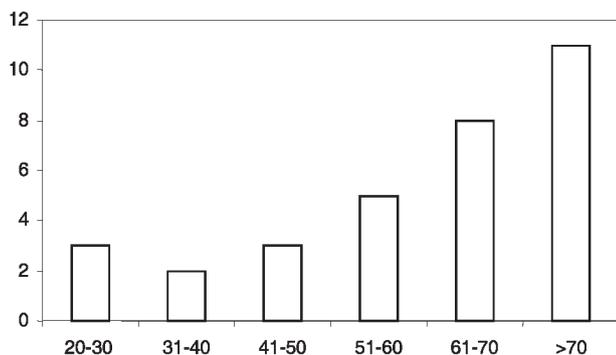


Fig. 1. Distribution of age group

Table-1: Reason for referral

	frequency	percentage
Disturbed behavior	30	93.75%
Disorientation	29	90.63%
Irrelevant talk	28	87%
Disturbed sleep	4	12.5%

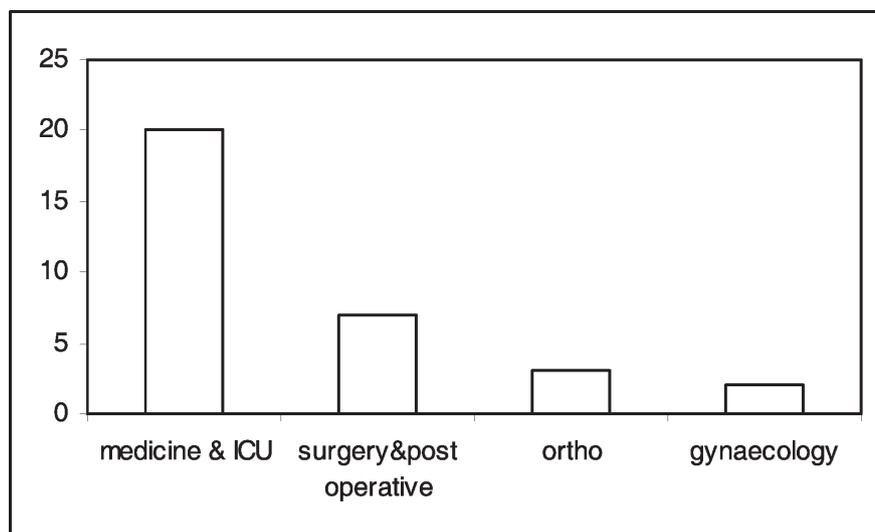


Fig. 2. Referring departments in order of frequency

DISCUSSIONS

Studies shows delirium occurs in 11% to 26% of older hospitalized medical inpatients.⁵⁻⁸ It is estimated that 10.0-15.0% of patients in general surgical ward and 15.0-25.0% in general medical ward develop delirium in their hospital stay. It appears to be associated with significant increase in length of hospital stay, rate of institutionalization, functional disability, and rate of death.⁹ There have been reports of around 51.0% of postoperative patients¹⁰ and up to 80.0% of terminally ill patients developing an episode of delirium.¹¹ Patients with cardiectomy, hip surgery, transplant, dialysis, burn and central nervous system lesions are at risk for delirium. Development of delirium is poor prognostic sign.² Usually the symptoms of delirium last 10 to 12 days but it can range from less than one week to 2 months.⁵⁻¹² In our study most cases were noted in age group above 70 years and with male preponderance which is comparable to study done by Meagher *et al*.^{13,14} It could be because subtle changes in clinical pictures of elderly are taken into consideration for consultation. In other study done by Formiga *et al* in 165 patients with delirium, the mean age was 80.3 years and female comprised the most cases.¹⁵

Symptoms of delirium can be divided into core features and associated features, core symptoms include disturbances of attention, memory, orientation, language, thought processes and sleep wake cycle. The associated features includes psychotic symptoms,

affective disturbances, different motoric presentation.^{1,16} Clinically three subtypes of delirium is described depending upon the psychomotor activity and arousal levels, hyperactive (agitated, hyperalert), hypoactive (lethargic, hypoalert) and mixed subtype.^{4,17,18} The hyperactive type is more often characterized by hallucinations, delusions, agitation and disorientation, while hypoactive type is characterized by confusion and sedation. In a study done by Meagher *et al* in 46 patient with delirium mixed subtype was seen most frequently, followed by

hyperactive and hypoalert subtype.¹⁹ Fang *et al* reported the most common subtype to be hypoactive in their study in terminally ill cancer patient.²⁰ In our study hyperactive subtypes was the most frequently seen, followed by mixed and hypoalert subtype of delirium respectively. This is in accordance with the study done by Camus *et al* in 183 elderly delirious patient.²¹ Chia-Yih Liu *et al* in their study of 96 patient with delirium the most common reason for referral was disturbed behavior, followed by psychotic symptoms like delusion and hallucination and sleep disturbances.²² Grover *et al* also reported abnormal behavior to be the main reason for referral.²³ In our study also disturbed behavior, disorientation and sleep disturbances were the common reason for referrals. This could be because disturbed behavior like restlessness, irritability, combativeness, uncooperativeness, nightmares etc is easily noticed. The

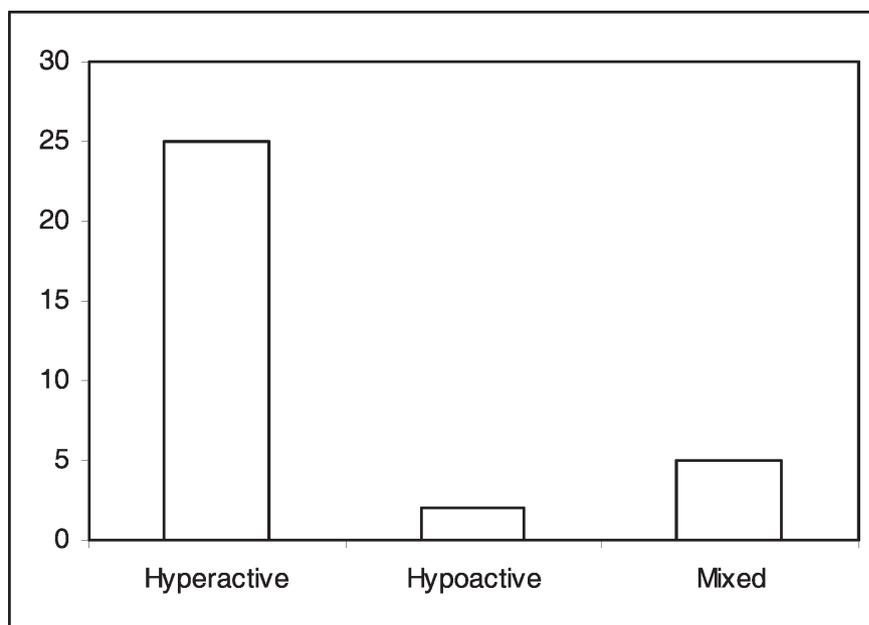


Fig. 3. Subtypes of delirium

other symptoms like lethargy, apathy, decreased alertness, sparse or slow speech etc may go unnoticed and hence the diagnosis may be missed.

Our study reinforces the clinical impression that hyperactive subtype of delirium is preferentially referred, probably because disturbed behavior is easily noticed. The other subtypes may go unrecognized. Prompt recognition and correcting the etiology can lead to decreased stay of institutionalization, functional disability and decrease morbidity and mortality. For this formal education and liaison psychiatric service should be enhanced.

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