Quest Journals
Journal of Medical and Dental Science Research
Volume 2~ Issue 10 (2015) pp: 28-30
ISSN(Online) : 2394-076X ISSN (Print):2394-0751
www.questjournals.org

Research Paper

Study on Clinical Manifestations of Delirium In Rural General Hospital

Dr. Kodali Madhavi[1], Dr. P. Krishna Mohan[2], Dr. P. Sai Kiran[3]
[1]*Asst. Professor, Dr. Pinnamaneni Siddhartha Institute of Medical Sciences & Research Foundation, Chinoutpalli*
[2]*Assoc. Professor, Dr. Pinnamaneni Siddhartha Institute of Medical Sciences & Research Foundation, Chinoutpalli*
[3]*Senior Resident, Guntur Medical College, Guntur*

Received 20 October, 2015; **A**ccepted 31 October, 2015 © The author(s) 2015. Published with open access at **www.questjournals.org**

ABSTRACT:- *Delirium is most frequent presentation in ICU patients and involves the constellation of symptoms with acute onset and fluctuating course. Early identification of the clinical manifestations has potential implications in management and prevention. All the patients admitted in ICU during the period from June 2012 to August 2012 are screened with Confusion assessment method for altered mental status were recruited for the study. Delirium was diagnosed as per the DSM-IV TR criteria. Each case was assessed by DRS-R-98. In this study neurological causes constituted the most common etiological factor for delirium. Among the severity of the individual symptomatology of delirium, highest severity is seen in sleep wake cycle disturbance and in disorientation.*

Keywords: - *Clinical manifestations of Delirium, Delirium, Etiology of Delirium*

I. INTRODUCTION

Delirium is characterized by a disturbance of consciousness with accompanying change in cognition which typically manifests as a constellation of symptoms with an acute onset and a fluctuating course. [1] Delirium is a serious complication that commonly occurs in critically ill patients in the intensive care unit which is frequently unrecognized or missed and leads to poor clinical outcomes.[2] Delirium has a limited agenda on teaching programs, research protocols, and therapeutic strategies. There is a dearth of Indian studies both in international and national scientific literature. [3]

II. AIMS AND OBJECTIVES

1. To study the severity of clinical manifestations in delirium.
2. To study the most common etiological factors in delirium

III. METHODOLOGY

The present study was carried out at Dr. Pinnamaneni Siddhartha Institute of Medical Sciences & R F General Hospital, extending health care facilities to rural population of Krishna District, in South India, after obtaining approval from the Institution's ethical committee. All the patients admitted in ICU during the period from June 2012 to August 2013 were recruited for the study .The procedures and rationale for the study were explained to all patients, but because of their delirium at entry into the study it was presumed that most were not capable of giving informed written consent.

Confusion assessment method (CAM) was used for screening altered mental status. CAM is a validated instrument for the diagnosis of delirium with high specificity[4]. Patients who are extremely ill and on ventilator and patients near to death are not included in the study.

Delirium was diagnosed with the help of consultant using DSM-IV-TR criteria. Each case was assessed by DRS-R-98 scale which is a 16 item scale with 13 severity items and 3 diagnostic items. Each item is rated 0 (abnormal/absent) to 3(severe impairment).Severity scale ranges from 0-39 with higher scores indicating more severe delirium.

*Corresponding Author: Dr. Kodali Madhavi[1]
[1]*Asst. Professor, Dr. Pinnamaneni Siddhartha Institute of Medical Sciences & Research Foundation, Chinoutpalli*

IV. RESULTS

Hundred patients are included in the sample. Out of which seventy five are men and twenty five are women. Mean age of all the individuals is 46.9 years.

4.1 Aetiology of Delirium:

Out of the total sample, 35 % of the individuals of the total sample have neurological causes and out of which 12 % have neurological infections and remaining 23 % was constituted by neurological problems other than infections which include Stroke, Hydrocephalus etc,. Renal causes constitutes 11 % and 10 % of the patients are in post operative period. 9 % of the individuals have metabolic disorders, 7 % of the individuals have head trauma, 6 % of the individuals have Hepatic disorders, 5 % of the individuals have fever for evaluation, OP poisoning constitutes 5 %, 1 % of the individual has Cellulites and 1 % of the individual is in post partum period. (Table 1)

4.2 Phenomenology and Severity of Delirium:

Among the Neuro psychiatric and behavioural disturbances, Sleep wake cycle disturbance is present in 92 % of the individuals and Delusions are seen only in 28.3 % of the individuals. Among the cognitive disturbances, Disorientation is present in 65 % of the individuals and short term memory is seen in 23.3 % of the individuals. Among the severity of the individual symptomatology of delirium, highest severity is seen in sleep wake cycle disturbance among behavioural disturbances and in disorientation among Cognitive symptomatology with mean values of 2.45 and 1.88 respectively. (Table 2 &3)

Table 1: Aetiology of Delirium

Disease	Frequency
Alcoholic withdrawal	5
Cellulites	1
CNS infections	12
Head trauma	7
HIV and other infectious diseases	5
Metabolic disorders	9
Neurological causes other than infections	23
OP Poisoning	5
Post operative	10
Post partum	1
Renal failure	11
Hepatic causes	6
Fever for evaluation	5
Total	100

Table 2 : Neuropsychiatric and behavioral disturbances

Symptom	Percentage Of Individuals With Symptoms	Mean Values Of Severity
Sleep Disturbances	97	2.45
Perceptual Disturbances	66.6	1.03
Delusions	28.3	0.2
Lability Of Affect	80	1.2
Language	86.6	1.48
Thought Process	83.3	1.06
Motor Agitation	83.3	1.06
Motor Retardation	81.6	1.36

Table 3 : COGNITIVE SYMPTOMS

Symptom	Percentage Of Individuals With Symptoms	Mean Values Of Severity
Orientation	**65**	**1.88**
Attention	51.6	0.66
St memory	23.3	0.3
Lt memory	43.3	0.48
Visuospatial ability	44.5	0.95

V. DISCUSSION

Our study was conducted on patients admitted in ICU in general hospital situated in rural area. In the present study, Severity of the delirium was assessed using DRS-R 98 scale and it was observed that Individuals have Neuro psychiatric behavioral symptoms as well as cognitive symptoms which support the statement of David. J. Meagher et al[5i], that delirium is complexity of neuropsychiatric syndrome which includes cognitive, behavioral and psychopathological features.

In terms of DRS-R-98 diagnostic items, all the patients fulfilled the criteria of 'temporal (acute) onset of symptoms and 'presence of an underlying physical disorder'. Among the severity of cognitive disturbances, Disorientation has got highest frequency (65%) with severity mean value of 1.88 followed by inattention (52%) with a mean severity value of 0.66. These findings are contrary to the findings of the earlier studies which found that highest severity is seen in Inattention than disorientation[5, 6]

Among non cognitive disturbances sleep wake cycle disturbances has got high frequency (97%) with severity mean value of 2.45 which was in accordance with the findings of previous studies [6]. According to Meagher DJ et al [5] patients can exhibit either hallucinations or delusions but not both. Similar findings were observed in our study. It was observed in our study perceptual disturbances (66.6%) were the most common psychotic disturbances followed by delusions (28.3%).

In our study neurological causes constituted the most common etiological factor for delirium which was similar to findings of Kostalova M, et al[7]. Previous studies regarding the etiology of delirium states that fever plays a key role in predisposing the individual to delirium [1,8] The finding of five individuals with fever as etiology supports the earlier studies

VI. CONCLUSION

This study is one of its kinds as it was done on patients belonging to purely rural background and standard instruments were used. The limitation of our study is that the subjects recruited in the study were from single hospital, so results can't be generalised to whole population. It can be concluded from this study that neurological causes constituted the most common etiological factor for delirium. Among the severity of the individual symptomatology of delirium, highest severity is seen in sleep wake cycle disturbance among behavioural disturbances and in disorientation among Cognitive symptomatology. Perceptual disturbances were found to be the most common psychotic disturbances

REFERENCES

[1]. Cavallazzi et al., Delirium in the ICU: an overview ., Annals of Intensive Care 2012, 2:49

[2]. Jun Gwon Choi ., Delirium in the intensive care unit ., Korean J Anesthesiol 2013 September 65(3): 195-202 .http://dx.doi.org/10.4097/kjae.2013.65.3.195

[3]. Pinto C . Indian research on acute organic brain syndrome : Delirium ., Indian Journal of Psychiatry . 2010 Jan ;52 (suppl 1) : S 139-47 .doi 10.4103 / 0019 -5545.69226

[4]. Qiyun Shi ., Confusion assessment method: a systematic review and meta-analysis of diagnostic accuracy., Neuropsychiatric Disease and Treatment 2013:9 1359–1370

[5]. Meagher Dj etal., Phenomenology of delirium. Assessment of 100 adult cases using standardized measures, 2007 Feb;190:135-4

[6]. S Grover ., Symptoms and Aetiology of Delirium: A Comparison of Elderly and Adult Patients ., East Asian Arch Psychiatry 2013;23:56-64

[7]. Kostalova M etal .,Towards a predictive model for post-stroke delirium PMID: 22571183.

[8]. Timothy D. Girdard et al., Delirium in the intensive care unit ., http// ccforum/com/ content/12/s3/s3