



SYMPTOMS OF PERI ICTAL AND NON EPILEPTIC PSYCHOSIS

PSYCHIATRY

Dr. Bhabani Shankar Shit

M.B.B.S., M.D., Associate Professor, Department of Psychiatry, MD (Psychiatry), Associate Professor, Dept Of Psychiatry, HTMC & Hospital, Rourkela, Odhisa

Dr. Ajay Kumar Bakhla*

M.B.B.S., M.D, DPM. Associate Professor Of Psychiatry, Department Of Psychiatry, Rajendra Institute Of Medical Sciences (RIMS), Ranchi, Jharkhand, India-834009
*Corresponding Author

Dr Amrit Pattojoshi

M.B.B.S., M.D, DPM., Professor, Dept Of Psychiatry, Hi-tech Medical College And Hospital, Bhubaneshwar, Odhisa

ABSTRACT

Aims and Objective— The current study compared psychotic symptoms as measured by BPRS among patients of mania across groups with and without history of seizures.

Method— In a retrospective chart review patients diagnosed as psychosis of any type were included, who were clearly classified as with presence or with absence of seizures historically. Review included recorded rating with BPRS of the patients, and analyzed across two groups named as peri ictal psychosis and psychosis without history of seizures.

Results— A total of 74 (53 male and 21 females) patients diagnosed as psychosis grouped as non epileptic psychoses consisting 46 patients (mean age 28.97 ± 10.51 years) and peri ictal psychosis consisting 28 patients (mean age 29.10 ± 6.59 years). the mean BPRS score for non epileptic psychoses patient was 31.54 ± 4.45 and for the group of peri ictal psychosis group it was 31.13 ± 4.36 (t value = .747, df= 72 and p value= .458), in addition to that all subscale means of individual BPRS items were statistically not different from each other.

Conclusions— This study reveals that presence or absence of seizure does not make any significant difference on psychosis symptomatology as measured by BPRS.

KEYWORDS

Peri ictal; Epilepsy; Psychosis.

INTRODUCTION

Epilepsy is highly prevalent condition, but all patients do not exhibit psychotic symptoms, in a study, prevalence of chronic interictal schizophrenia-like psychotic syndromes was found approximately 7% among patients with epilepsy[1], which is also termed as the “Psychoses of epilepsy (POE)” or “schizophrenia-like psychosis of epilepsy (SLPE)”[2], also it has been established that specifically temporal lobe epilepsy and recurrent episodes of epilepsy is associated with POE [3]. Prevalence of psychosis among patients of temporal lobe epilepsy is reported upto 10-19% [4]

A review differentiates POE from non epileptic psychosis by absence of negative symptoms and better premorbid as well as long term functional outcome [5]. Psychotic symptoms described with POE are often pleomorphic, including hallucinations (visual or auditory), delusions (grandiose, paranoid, somatic, religious), thought disturbances, disinhibition of sexual behavior or manic symptoms [6]

Methodology

This was a retrospective chart review study conducted at Dept Of Psychiatry, Hi-Tech Medical College and Hospital, Bhubaneshwar, Odhisa and HTMC & Hospital, Rourkela, Odhisa, India. The study was approved by the institutional review board. Old available case record file was reviewed for last two year, and case record file of patients with psychosis with or without history of epilepsy. Case record files have been rated with BPRS were included for the study, however many records were excluded from the study which were either not rated with any scale or rated with rating scales other than BPRS.

Participants were patients of between the ages of 18 and 60 years being treated on OPD basis in two years between January 2017 and December 2018, a total of 74 patients were included in this study. Two sets of total sample were tabulated, first group was consisted with patients who had psychosis but no history of seizure or epilepsy was recorded. Another group was consisted with patients who were diagnosed as psychosis and with positive history of seizures or epilepsy, this group is named as POE or peri ictal psychosis.

Tools

Socio-demographic Data Sheet: The socio demographic data sheet included age, religion, education and socio economic class of the patients. It also recorded provisional medical diagnosis.

BPRS : The 24-item BPRS (version 4.0) assesses 24 psychiatric symptoms [7]. The presence and severity of psychiatric symptoms were rated on a Likert scale ranging from 1 (not present) to 7 (extremely severe). Thus, possible scores vary from 24 to 168 with lower scores indicating less severe psychopathology. The 24-item BPRS interviews and ratings were assessed following the 24-item BPRS administration manual.

Statistical Analyses

The collected data of all patients was statistically analyzed, using Statistical Package for Social Sciences (SPSS, Inc., Chicago, Illinois) version 10.0.

Data analysis included means and standard deviations for each group, and clinical subgroup of the sample. The parametric t-test was used for continuous variable and chi square test for categorical variables to determine if differences existed between the groups. Statistically significant levels are reported for p values less than or equal to 0.05. Highly significant levels are p values less than .001.

RESULTS:

A total of 74 psychotic patients were included for the study, the whole sample was grouped on the basis of available history of any seizure was positive or negative, group with positive history was termed as peri ictal psychosis consisted 28 patients and another group of patients with negative history were termed as non epileptic psychoses and consisted of 46 patients. The mean age of non epileptic psychoses patient was 28.97 ± 10.51 years, whereas for peri ictal psychosis group, the mean age was 29.10 ± 6.59 years) (t value = -.058, df= 72 and p value= .954). There was total of 53 male patients and 21 females, among non epileptic psychoses patient male : female ratio was 36:10, and for peri ictal psychosis group it was 17:11. Most of the patients were married 28 and 21 respectively for non epileptic psychoses patient and peri ictal psychosis group, rest of the 18 and 7 patients were unmarried. religion wise a total of 68 patients were hindus and others only 06. Regarding family income 62 belonging to low socioeconomic class and 12 belonging to middle socio economic class, respectively for groups of non epileptic psychoses patients and peri ictal psychosis group, on chi square test there was non significant difference. (Table – 1).

These patients were rated with BPRS, and the mean BPRS score for non epileptic psychoses patient was 31.54 ± 4.45 and for the group of peri ictal psychosis group it was 31.13 ± 4.36 (t value = .747, df= 72

and p value= .458). We compared means of all items of BPRS individually across these two groups and all subscale means were statistically not different from each other (Table -2).

DISCUSSION

Symptoms of psychosis or mania may have differing presentation or intensity as reported earlier and may complicate the clinical picture. In this small study we classified psychotic patients on the basis of presence or absence of history of Multiple seizures in past. This is the simplest clinical features to identify peri ictal psychosis. Peri ictal psychosis encompasses the various seizure related psychosis like post ictal, pre ictal and interictal psychosis [8].

We attempted to study these two groups against psychotic symptoms items of BPRS, to find if any specific psychotic symptoms differ in these two groups. We evaluated a total of 74 patients of psychosis either manic episode or bipolar affective disorder or schizophrenia. The BPRS evaluates psychotic symptoms (18 items) which includes various set of symptoms including positive or negative symptoms, anxiety or depressive to catatonic symptoms like posturing somatic concern, anxiety, emotional withdrawal. We did not found any significant difference on ratings of these items. However there was non

significant higher scoring of peri ictal psychosis on the items of anxiety, emotional withdrawal, conceptual disorganization, tension, mannerism and posturing, grandiosity, depressed mood and disorientation. All other items were comparatively scored lower were somatic concern, guilt, aggression, paranoia, hallucinatory behavior, uncooperativeness and excitement. These findings are partially in accordance to few earlier studies [5,6]. There may be mild variation of symptoms severity across these two types of psychosis, but peri ictal psychosis is known for temporal relationship with ictus, abrupt onset, short duration of illness and better prognosis. Peri ictal psychosis is also known for relatively absence of negative symptoms, well adjusted premonitory and better long term outcome or functioning [9,10].

Lack of specific diagnosis may be more informative than merely a diagnosis of psychosis, cross sectional observational design and small sample size are the limitations of this study. However, a number of methodological issues need to be considered.

CONCLUSION:

This study reveals that presence or absence of seizure does not make any significant difference on psychosis symptomatology as measured by BPRS.

Table : 1 Sociodemographic variables of the study sample

		psychosis	peri ictal	total	t / chi-Square	df	Asymp. Sig. (2-sided)
Age		28.97 ± 10.51	29.10 ± 6.59		-.058	72	.954
Gender	Male	36	17	53	2.637	1	.104
	Female	10	11	21			
Marital status	Married	28	21	49	1.554	1	.213
	Un married	18	7	25			
Religion	Hindu	42	26	68	.56	1	.812
	Others	4	2	6			
Family income	LSES (1000-5000)	41	21	62	2.558	1	.110
	MSES(5000-25000)	5	7	12			
Education	Illiterate	7	7	14	4.760	3	.190
	Primary	20	15	35			
	Secondary	15	3	18			
	Graduate	4	3	7			

Table 2. Mean BPRS scores Comparing between non epileptic psychosis and peri ictal psychosis.

	Mean ± SD HADS Score		t	DF	Sig.(2-tailed) p value
	Non epileptic psychosis n = 46	peri ictal psychosis n = 28			
somatic concern	1.28 ± .68	1.21 ± .62	.427	72	.670
anxiety	.80 ± 1.00	.82 ± .86	-.075	72	.941
emotional withdrawal	.95 ± .20	1.00 ± .00	-1.430	45	.160
conceptual disorganization	1.06 ± .32	1.10 ± .56	-.404	72	.687
guilt	.30 ± .51	.25 ± .44	.467	72	.642
tension	2.52 ± 1.04	2.89 ± .87	-1.569	72	.121
mannerism and posturing	1.08 ± .41	1.10 ± .41	-.204	72	.839
grandiosity	2.45 ± 0.36	2.87 ± .85	1.306	46	.198
depressed mood	1.42 ± .46	1.58 ± .65	-.292	72	.771
aggression	3.45 ± .93	3.39 ± 1.2	.246	72	.807
paranoia	3.32 ± 1.44	3.03 ± 1.93	.686	45	.496
hallucinatory behavior	3.36 ± .89	3.17 ± .76	.527	72	.600
motor retardation	1.02 ± .14	1.00 ± .00	.778	72	.439
uncooperativeness	1.23 ± .60	1.17 ± .54	.433	72	.666
unusual thought content	1.41 ± .85	1.35 ± .82	.444	61	.659
Blunted Affect	1.02 ± .14	1.03 ± .18	.276	72	.784
Excitement	1.58 ± .53	1.42 ± .35	-.355	72	.724
Disorientation	.98 ± .13	1.00 ± .00	.928	72	.356
Total	31.54± 3.45	31.13 ± 5.36	.747	72	.458

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