



EFFICACY OF OLANZAPINE ON PANSS SCALE

Pharmacology

Dr. Sudhir Kumar Jain

M.D.(Pharmacology) N.S.C.B. Medical college Jabalpur (M.P.)

ABSTRACT

Present study is a cross section, observational study to find out adverse drug reactions and efficacy of antipsychotic drugs used in schizophrenia and bipolar patients. This paper is only a part of my study with thesis topic "an observational study of adverse drug reactions of antipsychotic drugs in schizophrenic and bipolar disorder patients."

Total 77 patients were registered after taking written informed consent. PANSS scale used in schizophrenia patients and this scale gives idea about patient improving on medication if score of scale is decreased.

Result statistically analyzed by paired t-test

KEYWORDS

Efficacy, Olanzapine, PANSS Scale,

INTRODUCTION

schizophrenia is a severe mental disorder. The Indian national rate observed was 2.3 per 1000^[1] and continued to be a major psychiatric problem often developing in adolescents or in early adulthood.

Symptoms of schizophrenia usually start between ages 16 and 30 year Olanzapine is a second generation Atypical antipsychotic drug used in schizophrenia.

The **PANSS (Positive and Negative Syndrome Scale)** is a 30 item rating scale that is specifically developed to assess individuals with schizophrenia and is used widely in research setting. It was published in 1987 by Stanley Kay, Lewis Opler, and Abraham Fiszbein. PANSS is based on premise that schizophrenia has two distinct symptoms, a Positive and Negative symptoms other than General Psychopathology symptoms

MATERIALS AND METHODS

study jointly conducted in department of pharmacology and department of psychiatry N.S.C.B. Medical College Jabalpur (M.P.) from February 2015 to March 2016. With efficacy assessment of drugs used as secondary objectives.

The participants in this study of any age and sex who had been offered to voluntary participate in this study and they had given the informed written consent before they were enrolled in the study, in case of minor informed written consent was obtained by his/her guardian.

For efficacy observation among schizophrenia patients PANSS (Positive and negative symptoms scale) score applied.

The **Positive Symptoms** include 7 features (P1-P7) each have its Rating from 1(absent) to 7(extreme) and The **Negative Symptoms** include (N1-N7) each have rating from 1(absent) to 7(extreme), **General Psychopathology items**(G1-G16) also have rating from 1(absent) to 7(extreme), each items has a definition and a basis for rating.^[2] The first question we need to answer when rating patient is whether the item is present or absent. The highest applicable rating point is always assigned, even if the patient meets criteria for lower points

In theory, a patient rated absent (1) on all items would receive a total score of 30 and a patient rated extreme (7) on all items would receive a score of 210. In real world no one sees these extremes. Stable out patients usually score 60 to 80. Inpatients rarely exceed 80 to 150, even in treatment refractory cases.^[3] Therefore the potential are 7 to 49 for the positive and negative scale, and 16 to 112 for general psychopathology scale

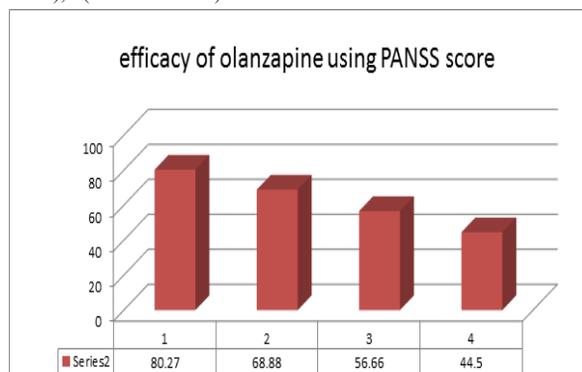
Score were taken after giving olanzapine as a single agent monotherapy at baseline and followup at 8th week, 16th week and at 24th week.

OBSRVTION AND RESULT

A total of 77 patients were registered highest patients registered in 30-39 year age group, Among all patients 49.35% (n=38) were males and 50.64% (n=39) were females. Out of 77 patients 47 patients were registered for schizophrenia in which 20 patients put on olanzapine monotherapy, below given graph show the efficacy of olanzapine in 24 weeks used in schizophrenia.

Graph -1:

Series 2 mean score at 1(Baseline score), 2(8th week score), 3(16th week score), 4 (24th week score)



PANSS score (score/ numbers given to patient according to his/her symptoms at baseline and at follow up visits) symptoms reduction in percentage found to be by olanzapine is 80.27 (baseline) to 44.5 (at 24 week) that is 55.43% (35.77).

DISCUSSION

although mean change in PANSS total scores is often the primary outcome measure, it is more clinically relevant to know how many patients achieved a certain degree of improvement. A "responder analysis" can help address this and inform the clinician about the proportion of patients who achieved a certain reduction in psychopathology, for example a 20% (barely perceptible), 30% (modest improvement), or 40% (relatively robust improvement) decrease in their PANSS total score from baseline. Clinically, it may be quite relevant to know that in a clinical trial 45% of the patients receiving the antipsychotic "responded" compared with 15% for placebo. This difference in response rates, 30%, would be attributable as the benefit of the medication^[4]

Most of the patient in this study were 31-39 year old, Efficacy in our study (improvement by Olanzapine In PANSS scale is about to be similar **Maciulis V, Bitter I** et al^[5]. the response rate is 55.43% in 6 month.

an individual patient is deriving benefits in terms of symptom reduction this would not be much of a surprise. However, in order for a medication to be effective it must also be tolerable for that specific

individual and the regimen must be adhered to^[6].

CONCLUSION

By this study conclusion drawn that olanzapine efficacy in reduction for PANSS score at 24 week is 55.43% if used in schizophrenia.

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