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### Comparison of relapse rates after Escitalopram and Milnacipran continuation treatment in patients of major depression

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#### Abstract

**Background:** Depression is a chronic relapsing and recurring disorder. Relapse rate are about 50% in people with depression previously treated adequately by the antidepressant. Our study aims to compare the relapse rates in patients treated with Escitalopram, a selective serotonin reuptake inhibitor (SSRI) and milnacipran, a serotonin norepinephrine reuptake inhibitor (SNRI).

**Method**: Our study aims to compare the relapse rate after Escitalopram and Milnacipran continuation treatment. Out patients of Psychiatry diagnosed with depression were assigned to receive acute phase treatment with either Escitalopram or Milnacipran for a duration of 8week.Remmiters in both the group then received continuation treatment with the same drugs for a period of 20weeks .Then the patients were followed up for a total of 12 months from the start of therapy. The relapse rate in both the group were compared.

**Conclusion:** *Relapse rates among patients in both the groups were found to be comparable in our study* **Keywords-** *SSRI, SNRI, Escitalopram, Milnacipran, relapse, remission.* 

#### Introduction

Major depression is a common psychiatric disorder characterized by depressed mood along with changes in behavior, cognition, sleep and appetite, impaired social functioning and occupational productivity, increased suicidal tendency, and increased mortality due to comorbid illness. Major depression is associated with a recurrence risk of 75%–80% which tends to increase with each episode<sup>1,2</sup>. successive WHO has reported approximately 10% lifetime international prevalence of depression, currently affecting nearly 350 million people worldwide. Depression accounts for grave economic implications with an estimated 110 million working days lost due to depression related impaired functioning<sup>3</sup>. Antidepressants have relatively well established role in the short-term treatment of acute depressive episode<sup>4</sup>. Relapse, defined as the re-emergence of depressive symptoms following successful acute treatment of major depressive disorder (MDD), is a significant concern associated with treatment of depression<sup>5</sup>. The aim of treatment is not only to make the patient well temporarily but to maintain them well. Current anti-depressant treatment guidelines suggest 4 to 6 months of continuation treatment to prevent relapse of an episode of major depression<sup>6,7</sup>.

Failure to follow these recommendations may increase the relapse rate by 70%<sup>8</sup>. Escitalopram is a selective serotonin reuptake inhibitor (SSRI) commonly used for treatment of depression whereas Milnacipran is a balanced dual reuptake inhibitor of serotonin and norepinephrine. In this study we compared the relapse rates of the two antidepressant during continuation phase of treatment.

#### Methods

The present prospective, open labelled, relapse prevention study was designed to determine and compare the effectiveness of Escitalopram and Milnacipran continuation treatment in preventing relapse of MDD. All of the study participants (both men and women) were between 18 to 60 years of age. Institutional Ethics Committee approved the study protocol. Written informed consent was provided by all participants before the study was initiated. All the participants who met the ICD-10 criteria for major depression, with a score of  $\geq 8$  on the 21-item Hamilton Depression Rating Scale (HDRS-21) and  $\geq 3$  on the clinical global impression (CGI) scale, were selected to participate in the study. Our study consisted of 2 phases-An acute phase of treatment in which the patients received either Escitalopram 10-20 mg or Milnacipran 50-100 mg for 8 weeks. The patients in both the groups were assessed for efficacy in terms of response (a decrease of  $\geq$ 50% in the HDRS scores) and remission (HDRS score of  $\leq$ 7).Remitters on HDRS in both the groups were eligible to enter the second phase i.e. continuation phase in which they received the same drug for a period of 20 weeks with follow up every second week to assess and compare for the relapse among participants upto a total period of 12 months from the initiation of therapy in both the groups. Relapse is defined as re-emergence of depressive symptoms during continuation phase depicted by an HRDS score of  $\geq 12$  or an increased CGI- score of  $\geq 2$  points compared with that obtained at week 8.

#### Results

After ignoring drop outs in both the groups, 48 patients from Group A who received Escitalopram 10-20 mg and 41 patients from Group B who received Milnacipran 50-100 mg, completed the acute phase treatment of 8 weeks.

The number of remitters in Escitalopram Group were 28(58.33%) whereas in Milnacipran Group were 14 (34.14%). The remitters in both the groups, then entered the continuation phase in which they received the same drug for the next 20 weeks.

6 out of 28 patients in Escitalopram Group i.e. (21.4%) and 3out of 14 patients(21.4%) in Milnacipran Group showed relapse during the continuation phase.

#### Discussion

The treatment of depression can be considered effective if the chosen antidepressant achieves and maintains remission for prolonged periods as depression is a highly relapsing and recurring disorder. Relapse has been defined as return of symptoms of the full blown Major depressive episode during remission but before recovery whereas "recurrence" was defined as the appearance of a new episode after a period of recovery<sup>9</sup>. The treatment of depression is divided into acute, continuation and maintainence phase. The acute phase of treatment lasts a minimum of 6-12 weeks. The goal of acute phase treatment is to achieve remission and a return to full functioning and quality of life. Continuation phase pharmacotherapy after successful is executed acute phase antidepressant therapy with the aim of preventing relapse in the period immediately following remission (i.e., a complete alleviation of symptoms) 10.11.12

The recommended duration of continuation therapy is about 4–9 months. The maintenance phase of treatment is carried out in patients with chronic and/or recurrent major depressive disorder who complete the continuation phase without relapse. The aim is to prevent recurrence of subsequent depression.

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In the present study Escitalopram has shown relapse rate of 21.4%. This finding is comparable to the previous study done by Rapaport et al<sup>13</sup>. in which relapse prevention study was done by comparing the relapse rates with placebo(26% compared with 40% for placebo). The study also concluded that escitalopram reduced the risk of recurrent depressive episode by 44%. A study done in elderly patients by Gorwood et al. also confirmed the relapse preventing efficacy of Escitalopram and stated that the risk of relapse among Escitalopram treated patients was reduced to one fourth as compared to plcebo<sup>14</sup>. Moreover, the study done by Kornstein et al<sup>15</sup> also confirmed the efficacy of Escitalopram in preventing recurrence of depression by maintenance treatment.

Milnacipran, in our study, had also shown relapse rate of 21.4%. Studies on other SNRI duloxetine reported relapse of 19.7% with duloxetine as compared to 38.3% for patients who received placebo<sup>16</sup>. Studies on efficacy of Milnacipran in recurrent depression has shown relapse rate of 16.3% as compared to 23.6% with placebo<sup>17</sup>. It can be concluded that both Milnacipran and Escitalopram showed similar relapse rate after continuation phase treatment.

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