



PREVALENCE OF GASTROINTESTINAL SIDE EFFECTS WITH THE USE OF SERTRALINE

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ABSTRACT

Objective: Sertraline is one of the most commonly used Selective Serotonin Reuptake Inhibitor (SSRI) in a variety of psychiatric disorders. One of its most common side-effects is gastrointestinal (GI). This study was undertaken to demonstrate the prevalence of this cumbersome side-effect with its use.

Method: A total of 116 participants were chosen from the psychiatry OPD of a tertiary care hospital in Eastern India who were on Sertraline monotherapy but did not have any gastrointestinal symptoms on initial presentation, and were followed up after one month of using Sertraline.

Results: Out of the total, 73 cases (62.9%) had reported one or more GI symptoms after one month, with a slight male preponderance. Most common reported GI symptom was dyspepsia (54.3%), followed by nausea (42.2%), anorexia and constipation.

Conclusion: This study clearly shows the high prevalence of GI side effects associated with the use of Sertraline.

KEYWORDS : Dyspepsia, Gastrointestinal side-effects, Nausea, Sertraline, SSRI

INTRODUCTION

Sertraline is a selective serotonin reuptake inhibitor (SSRI) indicated for use in Major depressive disorder (MDD), Obsessive-compulsive disorder (OCD), Panic disorder (PD), Post-traumatic stress disorder (PTSD), Social anxiety disorder (SAD) & Premenstrual dysphoric disorder (PMDD).¹ One of the most common side effects of Sertraline is gastrointestinal (GI), which includes nausea, vomiting, anorexia, constipation, diarrhea, dyspepsia etc.² Often these side effects are self-limiting, but could be troublesome to the patients at times and may require prompt attention.

Our aim of study is to assess the prevalence of gastrointestinal side effects with use of Sertraline in psychiatric patients attending a tertiary care hospital of Eastern India.

MATERIALS AND METHODS

Across-sectional, observational study was conducted in the Psychiatry OPD of a tertiary care hospital of Eastern India from July, 2018 to December, 2018, after obtaining approval of the Institutional Ethics Committee. A total of 116 drug-naïve, adult patients attending our OPD, who had been prescribed monotherapy with Sertraline due to a psychiatric disorder were included in our study after obtaining informed consent using simple random sampling. Patients with existing gastrointestinal symptoms, concomitant use of alcohol or other medications were excluded from this study.

A predesigned pretested questionnaire was used for obtaining sociodemographic details of the patients. Patients were followed up after one month of using Sertraline for emergence of gastrointestinal symptoms. Results were analyzed using statistical software.

RESULTS

The mean age of the study population was 34.1 ± 4.86 years (Range 18-48 years). Out of 116 participants, 54 were male and 62 were females. A total of 73 participants (62.9%) reported to have one or more gastrointestinal side effects following the use of Sertraline, of which 37 were males (68.5%) and 36 females (58.0%). Figure 1 shows different subgroups of patients suffering from gastrointestinal side effects. Table 1 shows different gastrointestinal (GI) side effects as reported by patients.

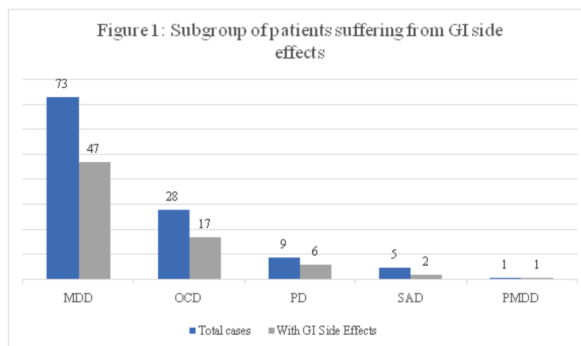


Table 1: Gastrointestinal Side Effects and their frequencies (n=116)

| Symptoms | Number | Percentage |
|--------------|--------|------------|
| Dyspepsia | 63 | 54.3% |
| Nausea | 49 | 42.2% |
| Anorexia | 41 | 35.3% |
| Constipation | 33 | 28.4% |
| Vomiting | 10 | 8.6% |
| Diarrhoea | 7 | 6.0% |

DISCUSSION

Sertraline is one of the widest used SSRI and among one of the safest.³ Apart from its action on serotonin receptors (SERT), it also exerts effect on dopamine transporters (DAT) and Sigma-1 receptor.^{4,5} It is used for a multitude of psychiatric disorders as monotherapy or with other agents.

One of the most common troublesome early side effects being gastrointestinal, it has rarely lead to discontinuation of this drug by patients.⁶ This side effect may be attributed to stimulation of 5HT-3 receptor, though exact mechanism is unknown.⁷ Sertraline is notorious in this regard, along with other SSRIs like Fluvoxamine & Paroxetine.

A significant proportion of study population taking Sertraline was found to have Gastrointestinal side effects (62.9%), with a slight male preponderance (68.5% in males vs 58.0% in females). Most common side effect was dyspepsia, affecting nearly half of the study population (54.3%), followed by nausea (42.2%), anorexia (35.3%) and constipation (28.4%).

Among the study subjects, 73 patients suffered from Major Depressive Disorder (62.9%), among which 47 (64.4% of all MDD cases) complained of gastrointestinal side effects. It was followed by Obsessive Compulsive Disorder (n=28, 24.1%), Panic disorder (n=9, 7.7%), Social Anxiety Disorder (n=5, 4.3%) and Premenstrual Dysphoric Disorder (n=1, 0.03%). The prevalence of gastrointestinal side effects in these disorders were 60.7% for OCD, 66.7% for PD, 40% for SAD and 100% for PMDD.

While these are recognized side effects in post marketing drug safety trials, the reported prevalence of these gastrointestinal effects were far less than we have seen in our clinical practice in India.⁸ The cause for such differences is unknown. However, these side effects promptly resolve with symptomatic treatments.

There were some limitations of our study. The study sample was not very large. The patients were not followed up too long to see whether these symptoms resolve spontaneously. We have not taken into account the short-term use of other non-prescription drugs by the patient. The psychiatric disease itself may have some gastrointestinal manifestations. The effect of smoking, dietary habits and tea/coffee has not been taken into account.

Despite limitations our study was able to clearly demonstrate the significant occurrence of one of the most common side effects associated with the SSRI Sertraline.

CONCLUSION

A significant proportion of patients taking Sertraline suffer from gastrointestinal side effects, and its recognition would lead to better patient management.

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