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SERTRALINE-INDUCED URINARY INCONTINENCE

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ABSTRACT

Introduction: Sertraline is a widely prescribed selective serotonin reuptake inhibitor (SSRI) with a favourable safety profile, though rare adverse effects may occur.

Case description: We report the case of a 73-year-old woman with generalised anxiety disorder and panic disorder who developed new-onset urinary incontinence after initiation of sertraline. Symptoms improved with dose reduction but recurred at higher doses, suggesting a causal relationship. Management with clomipramine and solifenacin successfully resolved the urinary incontinence while maintaining psychiatric remission.

Discussion: Our case contributes to the limited literature by documenting an elderly female patient who developed urinary incontinence secondary to sertraline, confirmed through a temporal association, dose-–response relationship, and symptom resolution with targeted interventions.

Conclusion: This case highlights the importance of recognising uncommon SSRI side effects and tailoring management to balance efficacy and tolerability.

KEYWORDS

Sertraline, SSRI, urine incontinence

LEARNING POINTS

- Sertraline can rarely cause urinary incontinence, with symptoms showing a dose-response relationship that improves after dose reduction.
- Recognition and management of this adverse effect (through dose adjustment, switching or adjunctive therapy) allows clinicians to maintain psychiatric remission while minimising distressing urinary symptoms.

INTRODUCTION

Currently, selective serotonin reuptake inhibitors (SSRIs) are the first-line treatments for anxiety and depressive disorders. Sertraline is widely prescribed due to its favourable safety profile and tolerability which were evidenced from multiple clinical studies[1]. Common side effects include gastrointestinal manifestations (nausea, diarrhoea, constipation and dry mouth) insomnia and sexual dysfunction[1].

However, rare and unexpected adverse effects may also occur. Urinary incontinence had been reported in literature as a rare side effect of sertraline[2]. We present the case of a 73-year-old woman who developed urinary incontinence due to sertraline.

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CASE DESCRIPTION

A 73-year-old female, mother of seven children, presented with a known history of type 2 diabetes mellitus, well controlled on sitagliptin/metformin 50/850 mg, and no prior psychiatric history. She was brought to the clinic by her daughter who, along with the patient, provided reliable collateral information.

The patient reported a one-year history of excessive and uncontrollable worrying, difficulty initiating sleep with fragmented sleep, joint pain and persistent fatigue. She also described infrequent but distressing episodes characterised by palpitations, shortness of breath, dizziness, sweating and intense fear of dying, consistent with panic attacks. In addition, she occasionally experienced low mood and chest tightness lasting for a few days, but without meeting full criteria for major depression. These symptoms persisted without clear triggers or identifiable psychosocial stressors and significantly impaired her social and personal functioning, leading to social withdrawal and avoidance of gatherings.

She denied suicidal or homicidal ideation, past or present. There was no history of agoraphobia, specific phobias, social anxiety, illness anxiety, psychotic symptoms, manic or hypomanic episodes, obsessive-compulsive symptoms or substance use. A family history of anxiety traits was noted among first-degree relatives, though no formal diagnoses or treatments were reported. Her psychosocial background was significant for a harsh childhood in a rural setting with poor socio-economic conditions, which contributed to personality features of perfectionism, meticulousness and rigidity.

Medical work-up, including laboratory investigations, ECG and specialist evaluations by cardiology, family medicine and endocrinology was unremarkable. Following a comprehensive psychiatric assessment and mental status examination, she was diagnosed with a comorbid generalised anxiety disorder (moderate to severe) with panic disorder (moderate intensity).

After discussing diagnosis and treatment options, she was started on sertraline 50 mg daily, titrated gradually, with follow-up in four weeks. At her first follow-up, she showed partial improvement both clinically and, on the GAD-7 scale, with no adverse effects. The dose was increased to 75 mg daily. Three weeks later further clinical improvement was noted, though still partial, so the dose was increased to 100 mg daily. Three days later, the patient and her daughter reported full remission of panic and anxiety symptoms and expressed satisfaction with the outcome. However, she developed new-onset urinary incontinence. She denied urinary tract infection symptoms, recent medication changes or psychosocial stressors. She was referred to a urologist, where extensive evaluation including urinalysis, urine culture, blood investigations and urodynamic testing ruled out urological causes. She was subsequently referred for psychiatric review.

After discussion with the patient and her daughter, it was considered that urinary incontinence could represent a rare adverse effect of sertraline. Options of dose reduction, medication switch or symptomatic treatment were discussed. The patient was initially advised for a dose reduction to 75 mg daily, which improved urinary incontinence but led to partial relapse of anxiety and panic symptoms. Preferring sustained psychiatric remission, the patient chose to return to sertraline 100 mg daily, despite recurrence of urinary incontinence.

She was then started on clomipramine 25 mg daily by the urologist (imipramine was unavailable) and solifenacin succinate 10 mg daily, which effectively resolved the urinary incontinence. At the time of last follow-up, she remained in full psychiatric remission with complete resolution of urinary symptoms.

DISCUSSION

SSRIs, including sertraline, are among the most commonly prescribed psychotropic medications worldwide. They are recommended as first-line agents for a variety of anxiety and depressive disorders due to their efficacy, safety and tolerability[1]. Nevertheless, as their use has expanded, a wide range of both common and rare adverse effects have been documented. Gastrointestinal disturbances, sexual dysfunction and insomnia are well-known[1], but rarely, urological side effects such as urinary incontinence are described[2].

Pease and colleagues[2] reported a case of urine incontinence in a 34-year-old female patient due to sertraline use, who had been diagnosed with obsessive-compulsive disorder. It was interesting that sertraline dose reduction from 300 mg daily to 150 mg daily was associated with an improvement in the urinary-induced side effects[2]. The same occurred in our case, as when we reduced the dose from 100 to 75 mg, the urine incontinence symptoms had been resolved.

Another case report was reported by Phiphopthatsanee[3]. The patient was a 14-year-old girl with a diagnosis of obsessive-compulsive disorder that was treated with cognitive behavioural therapy and sertraline. When the sertraline dose was increased to 100 mg daily, symptoms of urine incontinence, leakage and frequency had been reported. When the dose had been reduced to alternating doses of 75 and 100 mg, the patient reported a noticeable improvement in urinary manifestations[3]. Another case report was revealed by Özdemir et al.[4], where a 38-year-old female with a diagnosis of major depressive disorder had demonstrated urine incontinence manifestation after initiating treatment with sertraline (50 mg/day). The symptoms were resolved after switching to 20 mg/day fluoxetine[4].

The pathophysiological mechanism linking sertraline to urinary incontinence remains uncertain, but several hypotheses have been proposed. Increased serotonergic activity – by sertraline – may interfere with the coordination between bladder contraction and sphincter relaxation, leading to urinary complications[5]. Additionally, SSRIs

can indirectly affect cholinergic pathways that influence detrusor muscle activity[6]. In predisposed individuals, this imbalance may lead to urgency, frequency or incontinence. The temporal relationship observed in our patient, with the onset of incontinence after sertraline dose increase and symptom improvement upon dose reduction, supports a possible causal link. The subsequent recurrence of incontinence after dose re-escalation further strengthens this association.

Although imipramine has traditionally been used to treat urinary incontinence due to its anticholinergic properties, it was unavailable in our patient's context[7]. The successful use of clomipramine, another tricyclic antidepressant with similar pharmacological actions, highlights a viable therapeutic alternative. The addition of solifenacin, a selective antimuscarinic agent, provided further symptomatic control and ultimately resulted in full resolution of urinary symptoms. This combination allowed the patient to remain on a therapeutic dose of sertraline and sustain psychiatric remission, while avoiding the distressing urinary side effects.

CONCLUSION

Our case contributes to the limited literature by documenting an elderly female patient who developed urinary incontinence secondary to sertraline, confirmed through a temporal association, dose–response relationship and symptom resolution with targeted interventions. It emphasises that while SSRIs are generally safe, rare side effects must not be overlooked.

REFERENCES

1. Cipriani A, La Ferla T, Furukawa TA, Signoretti A, Nakagawa A, Churchill R, et al. Sertraline versus other antidepressive agents for depression. Cochr*ane Database Syst Rev* 2009;**15**:CD006117. doi: 10.1002/14651858.CD006117.pub2. Update in: *Cochrane Database Syst Rev* 2010;(1):CD006117. doi: 10.1002/14651858.CD006117
2. Pease E, Singh B, Ziegelmann M, Betcher H. Dose-dependent urinary incontinence with sertraline use in obsessive-compulsive disorder. *Psychopharmacol Bull* 2021;**51**:117–121.
3. Phiphopthatsanee N. Sertraline-induced urinary incontinence in adolescent: a case report. *BJPsych Open* 2023;**9**:S127. doi: 10.1192/bjo.2023.356
4. Özdemir PG, Aydin A, Güleç M, Akyüz Çim EF. Switching to fluoxetine in a case of sertraline-induced urinary incontinence: a case report. *Dusunen Adam J Psychiatr Neurol Sci* 2013;**26**:117–118. doi: 10.5350/DAJPN2013260116
5. Gormus ZIS, Vidin T, Koca RO, Solak H, Uslu EF. The effects of agomelatine, fluoxetine, and sertraline on rat bladder contraction in vitro. *Dusunen Adam J Psychiatr Neurol Sci* 2023;**36**:148–156. doi: 10.14744/DAJPNS.2023.00218
6. Uno J, Obara K, Suzuki H, Miyatani S, Chino D, Yoshio T, et al. Inhibitory effects of antidepressants on acetylcholine-induced contractions in isolated Guinea pig urinary bladder smooth muscle. *Pharmacology* 2017;**99**:89–98. doi: 10.1159/000452221
7. Hunsballe JM, Djurhuus JC. Clinical options for imipramine in the management of urinary incontinence. *Urol res* 2001;**29**:118–125. doi: 10.1007/s002400100175.