

C A S E R E P O R T

Exploring serendipitous relief: SSRIs as a potential treatment for aphthosis - a case report

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Abstract. Recurrent aphthous stomatitis (RAS) is a common and challenging inflammatory condition of the oral mucosa. The aetiology of RAS is multifactorial, and effective management options are currently limited. This case report explores an unexpected finding in the treatment of RAS, focusing on a patient treated with selective serotonin reuptake inhibitors (SSRIs) for anxiety and social phobia who experienced the resolution of aphthous stomatitis symptoms. A young male patient (LR) with infrequent periods of obsessions and compulsions, along with social phobia and panic attacks, was prescribed a daily dose of 20 mg of paroxetine. Remarkably, LR ceased experiencing episodes of aphthosis approximately two months after starting treatment. The improvement in RAS symptoms has been sustained for a duration of four years. This case report presents a unique finding in the management of RAS, with SSRIs, particularly paroxetine, demonstrating an unexpected collateral effect on the resolution of aphthous stomatitis symptoms. Previous reports have primarily involved monoamine oxidase inhibitors (MAOIs), and literature lacks clinical trials specifically evaluating the efficacy of SSRIs in treating aphthous stomatitis. Further research is warranted to elucidate the underlying mechanisms and establish the efficacy of SSRIs in larger-scale clinical studies. The collateral improvement of RAS symptoms in a patient being treated with an SSRI suggests a potential alternative treatment approach for this challenging condition. However, given the limitations of this single case report, further research is necessary to replicate these findings and evaluate the safety and efficacy of SSRIs in managing RAS.

Key words: case report, SSRIs, aphthosis

Introduction

Aphthous stomatitis, also known as recurrent aphthous stomatitis (RAS), is a painful and recurrent inflammatory condition of the oral mucosa that poses significant challenges in terms of management and treatment. It is the most common lesion affecting the oral mucosa in the general population¹. The aetiology of aphthous stomatitis is multifactorial, with various factors such as local trauma, genetic predisposition, nutritional deficiencies, viral and bacterial infections, as well as immune or endocrine disturbances being implicated².

While some cases of RAS can be linked to identifiable disease processes, a subset of patients presents with recurrent oral ulcerations without any identifiable

cause, leading to a diagnosis of exclusion³. Regardless of the aetiology, all forms of RAS have a significant impact on the quality of life and daily activities of the affected individuals².

Recent studies have shed light on the potential relationship between psychological stress and RAS, as well as its correlation with other oral conditions such as oral lichen planus⁴. Psychological factors such as anxiety, depression, and stress have been found to be highly associated with the symptoms of RAS and oral lichen planus.

Managing RAS can be extremely challenging, especially in cases where the disease presents with severe manifestations. Although several topical and systemic medications exist to control the symptoms of RAS, it

remains an incurable condition that significantly impacts the lives of otherwise healthy individuals².

This case report aims to explore a unique and serendipitous finding in the management of RAS, focusing on a patient treated with selective serotonin reuptake inhibitors (SSRIs) for a separate indication, who has experienced an unexpected resolution of aphthous stomatitis symptoms as a collateral effect. Through this case study, we hope to contribute to the understanding of potential novel approaches in the treatment of RAS and stimulate further research in this field.

Narrative

LR, a generally functional young male (26yo), presented with social phobia accompanied by panic attacks as a result of the Covid lockdown period. LR had a positive family history of both obsessive-compulsive disorder (OCD) and Alzheimer's dementia. In the past, he had used cannabinoids for anxiety relief, but currently, he neither drinks nor uses drugs; he also reported past infrequent obsessions and compulsions for which he never sought treatment. LR's personality displayed subclinical narcissistic traits that did not significantly impair his functioning. As part of his treatment, LR was prescribed a daily dose of 20 mg of paroxetine.

Interestingly, during the course of his treatment, a collateral effect was discovered. LR had been suffering from frequent episodes of aphthosis since adolescence, experiencing approximately six episodes per year. These episodes typically lasted for around ten days and moderately impaired his quality of life. Additionally, LR's mother also experienced similar episodes of aphthosis.

Approximately two months after the initiation of treatment with the selective serotonin reuptake inhibitor (SSRI) paroxetine, LR ceased experiencing episodes of aphthosis altogether. Remarkably, he has remained free from new episodes since then, with a treatment duration of three years. Table 1 shows the timeline.

Discussion

This case report presents a unique and unexpected finding in the management of recurrent aphthous

stomatitis (RAS). LR, a patient being treated with the selective serotonin reuptake inhibitor (SSRI) paroxetine for anxiety and social phobia, experienced a collateral improvement in his RAS symptoms. Prior to starting the SSRI, LR had been suffering from frequent episodes of aphthosis, lasting around ten days and moderately impairing his quality of life. However, approximately two months after initiating treatment with paroxetine, LR ceased experiencing any new episodes of aphthosis, and this improvement has been sustained for a duration of three years.

While our case report adds to the existing literature on RAS, it is important to note that previous reports of improvement in aphthosis symptoms with antidepressant medications have primarily involved monoamine oxidase inhibitors (MAOIs) and tricyclic antidepressants (TCA)⁵⁻⁷. Literature does not provide clinical trials specifically evaluating the efficacy of SSRIs in the treatment of aphthous stomatitis. This case report contributes to expanding our understanding of potential alternative treatment approaches for RAS and warrants further investigation in larger clinical studies. However, more research is needed to fully elucidate the specific mechanisms involved. The safety of SSRIs in long-term use has been well-documented,

Table 1. Timeline.

Date	Description
01/06/2020	LR presented with complaints of social phobia and panic attacks. He had a positive family history of obsessive-compulsive disorder. His personality displayed subclinical narcissistic traits. LR was prescribed a daily dose of 20 mg of paroxetine.
01/08/2020	LR returned for a control visit and reported sustained improvement in his mental distress symptoms.
30/11/2020	LR reported sustained benefit from the therapy, with complete restoration of his previous mental state. LR reported a surprising collateral finding: since starting paroxetine, LR had not experienced any new episodes of oral ulcers.
06/06/2023	LR's visit reaffirms the sustained benefit of the treatment on his mental well-being and highlights the continued absence of aphthous stomatitis episodes.

with established guidelines for monitoring and managing potential adverse effects.

It is important to acknowledge the limitations of this case report. It is a single case study, and while LR's improvement is noteworthy, it is necessary to replicate these findings in larger scale clinical trials to establish the efficacy of SSRIs in treating aphthous stomatitis.

Patient perspective

From LR's perspective, the focus of his concern had never been the recurrent episodes of aphthosis. Instead, it was the mental distress he experienced. LR had never sought treatment specifically for the aphthae, as he perceived them as a secondary issue.

However, LR's quality of life significantly improved when the aphthosis episodes disappeared after starting treatment with paroxetine. He no longer had to endure the discomfort, pain, and disruption caused by these recurrent oral ulcers. It was a surprising and unexpected outcome of his medication, as the primary goal had been to address his anxiety, social phobia, and panic attacks.

The unexpected disappearance of his aphthosis became an additional catalyst for the remarkable improvement he experienced in his overall quality of life. The disappearance of the oral ulcers brought about a significant positive change, not only physically but also emotionally.

Conclusion

In summary, this case report describes a patient with recurrent aphthous stomatitis (RAS) who experienced significant improvement in symptoms after being treated with the SSRI paroxetine for anxiety and social phobia. The patient's RAS episodes ceased for a duration of four years, suggesting a potential beneficial effect of SSRIs in treating RAS. However, more extensive clinical trials are needed to confirm these findings and establish the efficacy of SSRIs in the treatment of RAS. While this case report adds to our understanding of alternative treatment approaches for RAS, it is important to acknowledge its limitations as a single case study. Nonetheless, the safety of long-term SSRI use

is well-documented, and further research is warranted to explore the underlying mechanisms and potential benefits of SSRIs in RAS management.

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