

## EFFECTIVENESS OF BUPROPION IN PATIENTS WITH SEVERE ERECTILE DYSFUNCTION NOT RESPONDING TO TADALAFIL: A RETROSPECTIVE ANALYSIS

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### Abstract

**Background:** A number of men with severe erectile dysfunction (ED) fail to benefit from tadalafil, even when given in higher doses. Treatment options in such cases are limited. Bupropion, a non-serotonergic antidepressant, has shown potential benefits for sexual function and may offer an alternative route of treatment.

**Methods:** This was a retrospective review of patients between 25 and 60 years old diagnosed with severe ED who showed little or no improvement with tadalafil. These patients were later prescribed bupropion, either 150 mg or 300 mg daily. After 4-6 weeks, they were followed up to assess improvement in erections, ability to have intercourse, any side effects, and whether they chose to continue treatment.

**Results:** Most patients reported moderate to marked improvement in erection quality, and a good number were able to achieve satisfactory intercourse. Side effects were minimal, with occasional insomnia being the most commonly reported issue. A majority expressed satisfaction with the treatment and showed willingness to continue.

**Conclusion:** Bupropion may be a practical and effective treatment for patients with severe ED who do not respond to PDE5 inhibitors like tadalafil. Further prospective studies are encouraged to confirm these findings.

### INTRODUCTION

Erectile dysfunction (ED) is a common issue that affects many men, particularly as they age. While PDE5 inhibitors such as tadalafil remain a cornerstone in ED treatment, some patients fail to respond, leaving both patient and physician frustrated.

In search of alternatives, bupropion-a medication primarily used to treat depression and help with smoking cessation-has gained attention for its

potential pro-sexual effects. It acts through noradrenaline and dopamine pathways, rather than serotonin, which often has suppressive effects on sexual function.

In this study, we evaluated the outcomes of using bupropion in men who had not responded to tadalafil, based on follow-up interviews and clinical observations.

Materials and Methods

This was a retrospective study carried out in a urology outpatient setting. We reviewed cases of men aged 25 to 60 who had a diagnosis of severe ED based on clinical judgment and/or low IIEF scores and who had shown poor response to tadalafil even after multiple trials.

Patients were prescribed bupropion (starting at 150 mg/day, with dose increases to 300 mg/day if tolerated). No other medications for ED were added during this period. After 4-6 weeks, patients were asked to provide feedback on their erection quality, intercourse performance, side effects, and whether they intended to continue the medication.

No formal scoring tools were used in follow-up, but patients were guided to describe any changes compared to baseline.

### Result

The majority of patients (around 70-80%) reported some level of improvement in erectile function. Many were able to successfully engage in intercourse for the first time after previously failing with tadalafil.

Only a small number experienced minor side effects—mainly mild insomnia—which did not lead to discontinuation. Notably, none of the patients reported worsening of symptoms. Nearly all who improved chose to continue the medication beyond the observation period.

Although the results were based on subjective impressions, the consistency of positive responses was encouraging.

### Discussion

Bupropion works differently from traditional ED medications, enhancing central dopaminergic activity, which may boost sexual arousal and drive. Unlike PDE5 inhibitors, it does not act directly on blood flow but rather improves the mental and emotional components of sexual function, which are often under-recognized.

These findings are in line with earlier reports where bupropion improved libido and sexual performance,

especially in patients taking SSRIs or those with comorbid depression. In this study, the patients were mostly non-depressed and still responded positively, suggesting a broader application.

This could be particularly useful in primary care and urology settings, especially for patients hesitant to try injectables or surgeries. It also offers a low-cost oral option when other treatments fail.

### Conclusion

Bupropion may be a practical and effective treatment for patients with severe ED who do not respond to PDE5 inhibitors like tadalafil. Further prospective studies are encouraged to confirm these findings.

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