

Erectile dysfunction: Three rare cases of *Qsymia* side effect

Haitong Yu, Pratima Sood

ABSTRACT

Introduction: Sold under the brand name of *Qsymia*, the combination of phentermine and topiramate is a common medication used as an adjunct therapy for weight loss. Despite previous animal studies showing adverse effect to male rate infertility, sexual dysfunction including erectile dysfunction (ED) was not reported as an adverse effect for patient with obesity taking *Qsymia*.

Case Series: We presented three cases of patients with obesity who reported ED as an adverse effect of *Qsymia* with two cases demonstrating reversibility with either discontinuation of the medication or supplementation with Sildenafil. All the patients have comorbidities for ED and two patients have predisposition to ED. We discussed the potential mechanisms of action for the different components of *Qsymia* causing ED in the three cases by reviewing previous literatures.

Conclusion: Given the reversibility of ED and sufficient therapeutic effects, *Qsymia* should remain as the adjunct therapy for obesity along with diet modification and physical activities.

Keywords: Adverse effect, Erectile dysfunction, Obesity, *Qsymia*

doi: 10.5348/100082Z09HY2025CS

INTRODUCTION

Phentermine and topiramate, sold under the brand name *Qsymia*, is intended to be used as an adjunct to a reduced-calorie diet along with increased physical activity in patients with obesity (a body mass index (BMI) greater than 30 kg/m² or a BMI of 27 kg/m² or greater and who have at least one weight-related comorbidity) [1]. Phentermine is a sympathomimetic amine that reduces appetite through central nervous system (CNS) effects including releasing norepinephrine via hypothalamus stimulation. For topiramate, it is suspected to suppress appetite and enhance satiety through a combination of mechanisms including blocking neuronal voltage-dependent sodium channels, enhancing GABA(A) activity, antagonizing AMPA/kainite glutamate receptors, and weakly inhibiting carbonic anhydrase [2]. According to the result of the one-year Phase III trial of *Qsymia*, there is no report of adverse events related to sexual dysfunction (SD). The most frequent adverse events of clinical interest with full-dose were paresthesia (20%), dry mouth (19%), constipation (16%), dysgeusia (9%), insomnia (9%), and dizziness (9%) [3]. Though previous animal study has shown long-term topiramate ingestion produces adverse effects on fertility and reproductive system in adult male rat [4] and limited observational studies indicates 9% patients with psychiatric disorder reported topiramate-associated SD [5], there is no current report of erectile dysfunction (ED) for patients with obesity on *Qsymia*. In this case report and literature review, we present three extremely rare cases of male patients with obesity experiencing ED after starting *Qsymia* with two cases demonstrating reversibility.

How to cite this article

Yu H, Sood P. Erectile dysfunction: Three rare cases of *Qsymia* side effect. J Case Rep Images Med 2025;11(2):9–12.

Article ID: 100082Z09HY2025

Haitong Yu¹, BS, Pratima Sood², MD

Affiliations: ¹Case Western Reserve University School of Medicine, Cleveland, OH, USA; ²Louis Stokes Veterans Affairs Medical Center, Cleveland, OH, USA.

Corresponding Author: Haitong Yu, BS, 9501 Euclid Ave, Cleveland, OH 44106; Email: hxy375@case.edu

Received: 26 September 2025

Accepted: 04 November 2025

Published: 03 December 2025

CASE SERIES

Case 1

A 50-year-old male with a history of secondary hypogonadism, hypertension, prediabetes, and obesity (BMI 32.7) taking Androgel 3 pumps daily for six years was started on *Qsymia*; the patient was on *Qsymia*

7.5 mg/46 mg daily for weight management alongside recommendation for lifestyle and diet modification. During his four-month follow-up, the patient reported decrease in erection frequency (2–3 morning erections per week to 1 per week) and duration as well as difficulty in erection maintenance since he started *Qsymia*. He also reported other common self-resolved adverse effects noted with *Qsymia* including exacerbated nearsightedness and dry mouth. His BMI has decreased to 25.8 according to self-report. Despite significant weight loss, the decision was made to taper off *Qsymia*. In addition, the Androgel dose was increased to 4 pumps daily. Two months after stopping *Qsymia* and increasing Androgel dose, the patient reported complete resolution of ED. The patient has been managing his obesity well with lifestyle modification, diet modification, and exercise.

Case 2

A 48-year-old male with a history of anxiety, irritable bowel syndrome, insomnia, depression, post-traumatic stress disorder (PTSD), and class II obesity (BMI 36.85) was started on *Qsymia*. The patient was on *Qsymia* 7.5 mg/46 mg daily for weight management alongside recommendation for lifestyle and diet modification. During his two-month follow-up appointment, he complained about ED along with constipation and mood swings after starting *Qsymia*. Since the medication is effective in weight management (15-pound weight loss with BMI of 34.7), we decided to increase *Qsymia* to maximum dose (15 mg/92 mg) while starting the patient on Viagra 25 mg as needed (PRN) to treat ED. During his six-month follow-up, the patient continued to report constipation as an adverse effect. The Viagra 25 mg PRN treatment is effective in reversing his ED and he continued to benefit from *Qsymia* (12-pound weight loss since last visit).

Case 3

A 45-year-old male with a history of anxiety, hypertension, gastroesophageal reflux disease (GERD), alcohol dependence, and class III obesity (BMI 40.92) that underwent vasectomy taking Sildenafil 25 mg as needed was started on *Qsymia*. Patient was on *Qsymia* 7.5 mg/46 mg daily for weight management alongside recommendation for lifestyle and diet modification. During his six-month follow-up appointment, he reported ED while taking Sildenafil as before in addition to the common adverse effect of dry mouth. He lost 15 pounds on *Qsymia* and is now classified as class II obesity (BMI 39.96). Despite the adverse effect of ED, the patient is satisfied with weight loss and prefers to continue *Qsymia*.

DISCUSSION

Erectile dysfunction is defined as the failure to achieve or maintain a rigid penile erection suitable for satisfactory

sexual intercourse. Penile erection is achieved via the relaxation of the intracavernosal smooth muscle which allows increased blood flow into the corpora cavernosa. Nitric oxide (NO) released by the cavernous nerve terminals initiate the erection process while NO from endothelial cells maintain it [6].

The cause of ED is multifactorial involving underlying psychological causes (i.e., performance anxiety) and/or an organic etiology. Among all causes of ED, prescription medications contribute to one-quarter of them and common medications that have ED listed as a common side effect including most antidepressants, thiazide diuretics, and other antihypertensives [6]. Comorbidities for ED include age, hypertension, obesity, cardiovascular disease (CVD), benign prostate hyperplasia (BPH), and anxiety/depression [7]. For obesity, according to the meta-analysis performed by Pizzol et al., prevalence of ED is 31% higher for overweight men and 60% high for men with obesity. It is hypothesized that adipocytes contain high expression of aromatase which enzymatically converts testosterone to estradiol decreasing circulating androgens level. Androgens not only enhances sexual desire but also positively regulates NO synthase in the penis which both contributes to initiation and maintenance of an erection [8].

Since *Qsymia* is indicated for obesity, the prevalence of ED is higher in patients who are taking the medication compared to healthy men. In addition, all three patients reported have additional comorbidities for ED (Table 1): hypertension, anxiety/depression, and age (above 40 years old) [6]. While the patients reported are at significantly higher risk in developing ED due to having multiple comorbidities and two out of three patients have ED predispositions (Table 1), all three patients reported ED onset or increase in severity after starting recommended dose of *Qsymia* and two patients' ED demonstrated reversibility (Table 1). Therefore, it is reasonable to suspect the reported ED is due to *Qsymia*. However, reversibility of ED after stopping *Qsymia* alone cannot be established due to only having two patient cases reported here. In addition, *Qsymia* alone is causing ED as the side effect cannot be established as patients 1 and 2 received additional treatments in addition to discontinuation of *Qsymia*. Further evidence such as discontinuation of the medication alone or switching to a different weight loss drug lead to ED reversal is needed to confirm the suspicion.

The components of *Qsymia* are phentermine and topiramate. There is no primary literature on phentermine causing ED except decrease in libido. For topiramate, there has been one case report of a 52-year-old man taking it for alcohol dependence experiencing ED when the dose was raised to 50 mg and several cases of patients taking it for epilepsy. All of the reported topiramate-induced ED are dose-dependent (symptom development at 50–300 mg) and reversible with medication discontinuation [9]. The proposed mechanisms of topiramate causing reversible ED include vasogenic [10] and reducing free

Table 1: Erectile dysfunction cases linked to *Qsymia* use

Patient	ED comorbidities in addition to obesity	ED predisposition	Attempted treatment	ED reversibility	BMI decrease with <i>Qsymia</i>
1	Hypertension, age	Secondary hypogonadism	Androgel	Reversible with <i>Qsymia</i> discontinuation and increase Androgel	6.9 in 4 months
2	Anxiety, depression, PTSD, age	N/A	Viagra	Reversible with Viagra	2.15 in 2 months
3	Hypertension, anxiety, age	Taking Sildenafil 25 mg PRN	N/A	Unknown	0.96 in 6 months

Abbreviations: BMI, body mass index; ED, Erectile dysfunction; N/A: Not available; PTSD, post-traumatic stress disorder.

testosterone levels or affecting α -amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid glutamatergic pathways impacting penile blood flow [11, 12].

The dosage of topiramate taken by the patients when they reported ED was 46 mg which is close to the dose that develops symptoms (50 mg). It is also possible that the decrease in libido due to phentermine enhances the effect of topiramate-induced ED.

Despite the reported ED, all three patients noted sufficient therapeutic effect (Table 1). Given the effectiveness of *Qsymia* in treating obesity compared to monotherapy of phentermine, the limited cases reported for *Qsymia*-induced ED [13] and the reversibility of the adverse effect, *Qsymia* should remain as therapy for obesity regardless of whether the patient has additional comorbidities(s) for ED. However, physicians should be informed about this side effects while waiting for future data to confirm causality and guide management.

CONCLUSION

All in all, ED remains an exceedingly rare adverse effect of phentermine and topiramate. The three patients reported are the only ones described in the literature.

REFERENCES

1. Lonneman DJ Jr, Rey JA, McKee BD. Phentermine/Topiramate extended-release capsules (*Qsymia*) for weight loss. *P T* 2013;38(8):446–52.
2. Coulter AA, Rebello CJ, Greenway FL. Centrally acting agents for obesity: Past, present, and future. *Drugs* 2018;78(11):1113–32.
3. Shin JH, Gadde KM. Clinical utility of phentermine/topiramate (*Qsymia*TM) combination for the treatment of obesity. *Diabetes Metab Syndr Obes* 2013;6:131–9.
4. Otoom S, Batieneh H, Hassan Z, Daoud A. Effects of long-term use topiramate on fertility and growth parameter in adult male rats. *Neuro Endocrinol Lett* 2004;25(5):351–5.
5. Chen LWH, Chen MYS, Chen KY, Lin HS, Chien CC, Yin HL. Topiramate-associated sexual dysfunction: A systematic review. *Epilepsy Behav* 2017;73:10–17.

6. Leslie SW, Sooriyamoorthy T. *Erectile dysfunction*. In: StatPearls. Treasure Island (FL): StatPearls Publishing; 2024.
7. Pellegrino F, Sjoberg DD, Tin AL, Benfante NE, Briganti A, Montorsi F, et al. Relationship between age, comorbidity, and the prevalence of erectile dysfunction. *Eur Urol Focus* 2023;9(1):162–7.
8. Pizzol D, Smith L, Fontana L, Caruso MG, Bertoldo A, Demurtas J, et al. Associations between body mass index, waist circumference and erectile dysfunction: A systematic review and META-analysis. *Rev Endocr Metab Disord* 2020;21(4):657–66.
9. Garakani A. A case of reversible erectile dysfunction with topiramate for alcohol dependence. *Prim Care Companion CNS Disord* 2014;16(1):PCC.13l01565.
10. Civardi C, Collini A, Gontero P, Monaco F. Vasogenic erectile dysfunction Topiramate-induced. *Clin Neurol Neurosurg* 2012;114(1):70–1.
11. Calabrò RS. Topiramate and erectile dysfunction: Pathogenic mechanisms beyond sexual hormonal changes! *Clin Neurol Neurosurg* 2012;114(7):1114.
12. Calabrò RS. Topiramate and sexual dysfunction: Myth or reality? *Epilepsy Behav* 2013;27(2):424.
13. Aronne LJ, Wadden TA, Peterson C, Winslow D, Odeh S, Gadde KM. Evaluation of phentermine and topiramate versus phentermine/topiramate extended-release in obese adults. *Obesity (Silver Spring)* 2013;21(11):2163–71.

Acknowledgments

We would like to thank our patients for allowing us to write this case report.

Author Contributions

Haitong Yu – Analysis of data, Interpretation of data, Drafting the work, Revising the work critically for important intellectual content, Final approval of the version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Pratima Sood – Conception of the work, Design of the work, Acquisition of data, Revising the work critically for important intellectual content, Final approval of the

version to be published, Agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved

Guarantor of Submission

The corresponding author is the guarantor of submission.

Source of Support

None.

Consent Statement

Written informed consent was obtained from the patient for publication of this article.

Conflict of Interest

Authors declare no conflict of interest.

Data Availability

All relevant data are within the paper and its Supporting Information files.

Copyright

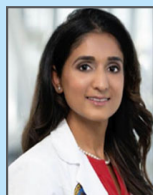
© 2025 Haitong Yu et al. This article is distributed under the terms of Creative Commons Attribution License which permits unrestricted use, distribution and reproduction in any medium provided the original author(s) and original publisher are properly credited. Please see the copyright policy on the journal website for more information.

ABOUT THE AUTHORS

Article citation: Yu H, Sood P. Erectile dysfunction: Three rare cases of Qsymia side effect. J Case Rep Images Med 2025;11(2):9–12.



Haitong Yu is a third-year medical student at Case Western Reserve University School of Medicine. He earned the undergraduate degree in Neuroscience from University of Michigan. His research interests include quality of life for patients living with chronic urological disorders (i.e., Benign Prostatic Hyperplasia), risk factors for poor perioperative outcomes for kidney stone surgeries, and prostate cancer screening. He intends to pursue a career in urology in future.



Pratima Sood is an Assistant Professor of Medicine at Case Western Reserve University School of Medicine and an Endocrinologist at Louis Stokes Veterans Affairs Medical Center, Cleveland, Ohio. She earned the undergraduate degree Bachelor of Life Sciences from New York Institute of Technology, Old Westbury, New York, USA and postgraduate degree form Doctor of Medicine from Saint Matthew's University, Grand Cayman Islands, British West Indies. She has published research papers in Journal of Case Reports and Images in Medicine.
Email: Pratima.Sood@va.gov

Access full text article on
other devices



Access PDF of article on
other devices





INTERNATIONAL JOURNAL OF
CASE REPORTS AND IMAGES



VIDEO JOURNAL OF
CLINICAL RESEARCH



VIDEO JOURNAL OF
BIOMEDICAL SCIENCE



INTERNATIONAL JOURNAL OF
HEPATOBIILIARY AND
PANCREATIC DISEASES



INTERNATIONAL JOURNAL OF
BLOOD TRANSFUSION AND
IMMUNOHEMATOLOGY



EDORIUM JOURNAL OF
OPHTHALMOLOGY



Submit your manuscripts at
www.edoriumjournals.com



EDORIUM JOURNAL OF
MEDICINE



EDORIUM JOURNAL OF
CARDIOTHORACIC AND
VASCULAR SURGERY



JOURNAL OF CASE REPORTS
AND IMAGES IN ORTHOPEDICS
AND RHEUMATOLOGY



EDORIUM JOURNAL OF
PSYCHOLOGY



EDORIUM JOURNAL OF
CELL BIOLOGY



JOURNAL OF CASE REPORTS AND IMAGES IN
DENTISTRY



EDORIUM JOURNAL OF
CANCER



EDORIUM JOURNAL OF
PSYCHIATRY



JOURNAL OF CASE REPORTS AND
IMAGES IN INFECTIOUS DISEASES



EDORIUM JOURNAL OF
ANATOMY AND EMBRYOLOGY



EDORIUM JOURNAL OF
SURGERY



JOURNAL OF CASE REPORTS
AND IMAGES IN PATHOLOGY



EDORIUM JOURNAL OF
ANESTHESIA