### **CASE REPORT**

# From Weight Loss to Bedroom Gains: A Case Report on Bariatric Surgery Resolving Erectile Dysfunction

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#### **ABSTRACT**

This case involves a 59-year-old Malay man who struggled with erectile dysfunction (ED) due to his poorly controlled underlying health conditions for about two years. Despite long-term management for diabetes, hypertension, and dyslipidemia, his weight gain and worsening sugar control affected his ability to maintain an erection during sexual activity. He tried various medications and treatments, including traditional remedies and oral drugs like Kamagra, with little success. Eventually, he underwent bariatric surgery, which led to improvements in his ED, along with better control of other health issues. Psychological factors, like stress and desperation, also played a significant role in his journey, highlighting the importance of holistic care and proper management of both physical and mental health in addressing er ED ectile dysfunction. This case underscores the potential benefits of bariatric surgery in obese patients with ED and emphasizes the need for comprehensive healthcare approaches to manage these complex issues effectively.

#### Keywords

Erectile Dysfunction (ED), Obesity, marital satisfaction , Anxiety

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# INTRODUCTION

Erectile dysfunction (ED) is a condition that extends beyond its impact on the physical health of men, influencing various aspects of their lives and relationships. Beyond its physiological effects, ED can cause emotional distress, erode self-esteem, and strain intimate relationships. ED often serves as a barometer for overall health, reflecting underlying conditions such as cardiovascular disease, obesity, or psychological factors like stress and anxiety. Consequently, addressing ED requires a holistic approach, encompassing medical intervention, lifestyle changes, and open communication between partners. By acknowledging the broader implications of ED, we can foster a more supportive and understanding environment.

In Malaysia, ED is a very common, though frequently taboo, problem among men. The most recent National Health and Morbidity Survey (NHMS) in Malaysia showed that there is a prevalence of moderate to ED in up to 31.6% of the population. Despite its widespread occurrence, cultural taboos and stigma surrounding discussions of sexual health can hinder individuals from seeking help or openly addressing their concerns. However, recognizing ED as a medical condition

rather than a personal failure is crucial in promoting awareness and encouraging men to seek professional assistance.

Malaysia is also grappling with the growing issue of obesity. In the World Health Organization (WHO) report of 2019, Malaysia ranked highest among Asian nations, with over 64% of the male population being overweight or obese.<sup>2</sup> Based on the NHMS 2015, the rate of obesity in individuals aged 18 and above was over 17.7% (equivalent to 3.3 million people), while the rate of overweight patients was 30% (equivalent to 5.6 million people). <sup>3</sup> Currently, bariatric surgery is the only effective option for attaining sustained weight loss in persons with obesity. Over the past decade, there has been a notable increase in the number of individuals choosing bariatric surgery and reaping numerous benefits.<sup>4</sup>

Male sexual dysfunction refers to a range of health issues, specifically including a decrease in sexual desire (libido), difficulty achieving or maintaining an erection, or problems with ejaculation. ED is the most prevailing problem associated with obesity in male patients. In contrast, hypertension, dyslipidemia,

obesity, and diabetes mellitus, which are components of the metabolic syndrome, are reversible risk factors for ED. After bariatric surgery, a complicated mechanism reduces the metabolic risk factors, which lead to a more marked resolution of erectile function. However, given the complexity of ED's origins, treating the problem will require a multidisciplinary approach.

A study involving male obese patients showed that erectile ED was common before bariatric surgery<sup>5</sup>, with significant improvement post-surgery. Another study found that bariatric surgery is more effective than non-surgical weight loss in improving erectile performance and hormone levels in morbidly obese men.<sup>6</sup> However, this case discussed here represents the delicate management of a patient who faced difficulties in encountering an ED during the initial treatment.

#### **CASE REPORT**

This is a case of a 59-year-old Malay gentleman who has had a longstanding ED since his underlying comorbidities became uncontrolled in the past two years. He is a non-smoker and does not take any alcohol. He has been under primary care follow-up for diabetes mellitus, hypertension, and dyslipidemia for almost 10 years, but noticed his problem with erection when his weight increased above 85 kg and worsening of blood sugar control. He struggled to gain an erection and penetration during attempted sexual intercourse with his wife. His libido was normal, and he claimed to have a normal morning erection. His International Index of Erectile Function (IIEF-5) was 5. Psychologically, he was less satisfied, leading to less motivation and anxiousness upon attempting intercourse. He was married to a 47-year-old lady for 20 years. His wife's libido is normal, and her sexual satisfaction was not up to expectations. Thus, the pressure and tension led to high expenditure in various clinics and private hospitals for medication and treatment for the erectile problem.

His visits to the general practitioner started around two years ago. He was initially using traditional supplements such as *Tongkat Ali*, with no positive results. He was then prescribed oral Kamagra but stopped the usage after two

pills. He claimed to have an erection but was unable to achieve ejaculation even after 30 minutes and started to feel mild chest discomfort after the intake of the traditional drug. He attempted a few more medications such as oral Sildenafil and Tadalafil subsequently, but his ED did not improve. He also took a course of plateletrich plasma intra-cavernosal injection without success. One of the GPs eventually referred him to a private center in Kuala Lumpur for bariatric surgery. He underwent bariatric surgery in January 2023. He was then referred to a teaching hospital men's health clinic for further ED management. He had spent up to RM 30,000 of his earnings.

Clinically, the patient looked well without exhibiting distress or low mood upon encounter. He was well-hydrated, well-kept, and able to express his worry clearly. He was of a good build, is not obese, and had no pallor or jaundice. His hair distribution is appropriate. Upon examination his genital organ was grossly normal, and his testicular size was average at 20 ml bilaterally. He exhibited no sign of hypogonadism.

After the bariatric surgery, the IIEF-5 score improved from 5 to 8 (Table I). The laboratory blood parameters showed improvement in the underlying comorbidities (Table II). The blood sugar control improved with an HbA1c of 5.7% and a low-density lipoprotein level of 2.7 mmol/L. Throughout the men's health clinic follow-up his renal and liver functions were normal. His serum testosterone level was normal at 18.72 mmol/L.

He was re-started on oral Sildenafil 100 mg on a per-needed basis upon the encounter, with counseling on the correct way to take the medication. With mild improvement in erectile function, he was keen to change to oral Tadalafil due to previous experience, and it was easier to consume. He tolerated Tadalafil, and his IIEF-5 score improved to 15 (Table I). His Erection Hardness Score improved from 2 to 3. He gradually tapered down his medication and eventually maintained his erection for up to 20 minutes without the help of any PDE-5 inhibitor.

Table I: IIEF-5 score for the patient through the follow-up

	rabie i:	HEF-5 score i	or the patien	it through the i	опоw-up		
Over the past four weeks,							
1	How do you rate your confidence that you could get and keep an erection?	Very low 11	Low 2 <sup>2</sup>	Moderate 3 <sup>3</sup>	High 4	Very high 5	
2	When you had erections with sexual stimulation, how often were your erections hard enough for penetration?	Almost never/ never 11	A few times 2 <sup>2</sup>	Sometimes 3 <sup>3</sup>	Most of the times 4	Almost always/ always 5	
3	During sexual intercourse, how often were you able to maintain your erection after you had penetrated your partner?	Almost never/ never 11	A few times 2 <sup>2</sup>	Sometimes 3 <sup>3</sup>	Most of the times 4	Almost always/ always 5	
4	During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?	Extremely difficult 11:2	Very difficult 2	Difficult 3 <sup>3</sup>	Slightly difficult 4	Not diffficult	
5	When you attempted sexual intercourse, how often was it satisfactory for you?	Almost never/ never 11,2	A few times 2	Sometimes 3 <sup>3</sup>	Most of the times 4	Almost always/ always 5	

<sup>1</sup> Score during pre-bariatric surgery encounter

Table II: IIEF-5 score for the patient through the follow-up

	Pre bariatric surgery (January 2023)	Post bariatric surgery (May 2023)
Weight (kg)	90.7	70.1
BMI $(kg/m^2)$	31.0	23.9
HbA1c (%)	7.0	5.7
LDL (mmol/L)	3.2	2.7
Triglycerides (mmol/L)	1.51	1.2
Serum Testosterone (ng/dL)	-	18.73

## **DISCUSSION**

Erectile dysfunction and obesity are two prevalent health concerns affecting millions worldwide. ED refers to the consistent inability to achieve or maintain an erection sufficient for satisfactory sexual performance. It is persistently an underreported issue despite its high prevalence and negative impact psychologically and financially, as well as the availability of numerous successful treatments. The stigma of discussing ED as a problem remains a central issue, and the appropriate way to tackle this is to prepare healthcare providers with ample knowledge and communication skills to approach them. Effective screening of men's health problems during regular non-communicable disease follow-ups or outpatient clinic visits is vital in tackling these issues.

In our case, the patient did not reveal his concern about his sexual problem during his regular follow-up. Instead, he went to alternative clinics to seek opinions and treatment.

Obesity is characterized by excess body fat accumulation, often leading to various metabolic complications. There is significant association between obesity and ED, with obese men found to experience a 50% higher incidence of ED.8 Obesity also contributes to the development of cardiovascular diseases and type 2 diabetes, which are known risk factors for ED. Currently, the only mainstay of treatment for obesity with complications is bariatric surgery.

Understanding the interplay between obesity and ED is crucial for healthcare professionals in managing these conditions effectively. Addressing obesity through lifestyle modifications or surgical interventions like bariatric surgery may improve overall health and alleviate ED, ultimately enhancing the quality of life for affected individuals. Systematic reviews have mentioned that despite the significant benefit of bariatric surgery on ED, multifactorial causes need to be considered and managed altogether.<sup>9</sup>

Psychological factors play a significant role in both ED and obesity. Factors such as stress, anxiety, sadness, and low feelings of self-worth might contribute to the development or worsening of the condition. They may interfere with sexual arousal, performance, and satisfaction, resulting in challenges in attaining or sustaining an erection. In our patient, the pressure and desperation led to an unhealthy search for a proper treatment. Over-spending and trials of the possibly harmful, yet-to-be-approved methods may bring more damage to patients.

It is essential to review the general health condition of each ED patient, despite reviews and case reports supporting the importance of weight loss through bariatric surgery in improving the outcome. A healthy lifestyle, keeping the co-existing comorbidities under control, healthy aging, and proper sexual health education are crucial to ensure ED is managed accordingly. Our patient

<sup>&</sup>lt;sup>2</sup> Score during post-bariatric surgery encounter, before PDE-5 inhibitor treatment

<sup>&</sup>lt;sup>3</sup> Score during post-bariatric surgery encounter, after PDE-5 inhibitor treatment

was followed up thoroughly for his diabetes problem, 7. hypertension, and dyslipidemia. He managed to maintain his weight, and he was assisted with a PDE-5 inhibitor initially to assist in his ED problem. With support from his spouse and maintenance of healthy lifestyle, he was eventually able to regain satisfaction in his sexual life.

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