

CASE

A 33-year-old male, presented with hypogonadism and infertility. His symptoms of hypogonadism preceded an increase in weight of 40 kg within two years. Blood pressure was 112/78 mmHg. He had sparse facial and axillary hair with Tanner stage 2. His latest weight was 164 kg (BMI 52 kg/m²). He had no acanthosis nigricans. His serum prolactin was 5985 m IU/L. He had low fasting morning serum testosterone [1.11 nmol/L]. FSH and LH levels were both low [0.3 IU/L]. His metabolic parameters were all normal: HDL 1.1, LDL 2.7, Triglyceride 1.1 (mmol/L), HbA1c 5.3%, Fasting Blood Sugar 4.7 mmol/L. MRI showed pituitary microadenoma. Other anterior pituitary hormonal assays were normal. He was started on Cabergoline 0.5 mg once a week.

CONCLUSION

The relationship between hyperprolactinemia and obesity is complex. In our patient, the sudden weight gain coincided with symptoms of hypogonadism due to hyperprolactinaemia. Thus, hyperprolactinaemia may have contributed to his weight gain. He also has normal metabolic parameters despite being obese class 3, which could indicate the protective value of elevated prolactin levels. In treating obese patients with hyperprolactinemia, a prolactin level that is too high or too low is proven to be unfavourable.³ Thus, treatment with cabergoline has been shown to help in reducing weight in this group of patients while keeping the serum prolactin at a slightly higher level to avoid diminishing the protective value of prolactin in obese patients.^{3,4,5}

EP_A063**A CASE OF KETOGENIC DIET-INDUCED ELEVATED CHOLESTEROL**

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Goh Qing Ci and Norlaila Mustafa

Hospital Canselor Tunku Muhriz UKM (HCTM), Malaysia

INTRODUCTION/BACKGROUND

Weight management through exercise and dietary intervention has been shown to reduce cardiovascular risk. Here, we report a case of significant weight loss achieved through exercise and a ketogenic diet, resulting in a deranged lipid profile.

CASE

A 39-year-old female with underlying class 3 obesity and type 2 diabetes mellitus on metformin 500 mg BD was first seen in March 2022. Her weight was 153 kg and her BMI was 58.2 kg/m². Since then, she has diligently followed a strict ketogenic diet and exercised daily. She ate one meal a day,

and her diet primarily consisted of meat, eggs, nuts, cheese and fresh cream. Over the past 18 months, she successfully lost 85 kg, and her BMI decreased to 25.6 kg/m². Notably, her body composition improved, and her diabetes went into remission. However, her lipid profile exhibited marked derangement.

Physical examination revealed no significant abnormalities, and it was noteworthy that both her parents had a history of dyslipidaemia. In response to the deranged lipid profile, the patient was advised to discontinue her current dietary plan. Instead, a more balanced diet emphasizing lower fat content, higher fibre intake and appropriate carbohydrate levels was recommended. Additionally, she was initiated on atorvastatin in October 2023 to address the lipid abnormalities. Regular monitoring and follow-up appointments were scheduled to track her progress.

CONCLUSION

While intermittent fasting and the ketogenic diet can undoubtedly lead to desired weight loss, patients should be counselled and carefully monitored by their physicians. This case illustrates that much is still unknown about the impact of these diets.

EP_A064**BODY COMPOSITION CHANGES 12 MONTHS POST-METABOLIC SURGERY IN MALAYSIAN ADULTS WITH OBESITY: THE DIFFERENCES IN DIABETIC STATUS**

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Nur Azlin Zainal Abidin,¹ Liyana Ahmad Zamri,¹ Farah Huda Mohkiar,¹ You Zhuan Tan,¹ Fazliana Mansor,¹ Poh Yue Tsen,² Shu Yu Lim,^{2,3,4} Gee Tikfu^{2,3,4}

¹Nutrition, Metabolism and Cardiovascular Research Centre, Institute for Medical Research, National Institute of Health, Ministry of Health Malaysia.

²Sunway Medical Centre, Bandar Sunway, Petaling Jaya, Selangor, Malaysia

³iHeal Medical Centre, Menara IGB, Mid Valley City, Kuala Lumpur, Malaysia

⁴Sunway Velocity Medical Centre, Sunway Velocity, Kuala Lumpur, Malaysia

INTRODUCTION

Body composition analysis following metabolic surgery is vital for clinical evaluation and monitoring treatment outcomes. In Malaysia, however, the evidence for these changes is limited. We aimed to explore the changes in body composition in patients with obesity after 12 months of metabolic surgery, according to their diabetes status.