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A GRIM TURN OF OBESITY-RELATED SURGERY: WERNICKE'S ENCEPHALOPATHY, SLEEVE GASTRECTOMY GONE WRONG

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INTRODUCTION/BACKGROUND

Wernicke's encephalopathy (WE) is a devastating neurologic syndrome resulting from thiamine deficiency, typically affecting those with chronic alcoholism or poor nutrition, and post-bariatric surgery patients. We present a case of WE that developed after 3 months after laparoscopic sleeve gastrectomy.

CASE

A 38-year-old male with morbid obesity (BMI 44 kg/m²) who underwent laparoscopic sleeve gastrectomy in December 2022, was admitted due to development of a gastrocutaneous fistula and resultant intraabdominal sepsis. He was on prolonged nil by mouth and nutritional support was given through total parenteral nutrition. After one month of admission, he developed unsteadiness and blurring of vision. Physical examination noted he appeared confused, with ophthalmoplegia, bilateral horizontal nystagmus, and ataxic gait. Basic blood exams showed hypochromic microcytic anaemia with haemoglobin of 8.3 g/dL. Unfortunately, our centre was unable to provide a test for serum thiamine. Brain MRI showed symmetric hyperintensities in the thalami, mamillary bodies, tectum of the midbrain, and periventricular region, indicating Wernicke's encephalopathy. Thus, parenteral thiamine replacement was given followed by oral therapy upon discharge. A follow up visit after one month noted complete resolution of symptoms and signs.

Sleeve gastrectomy, an intervention for morbid obesity, may result to macro-micronutrient deficiency due to reduced nutrient absorption from gut alterations and reduced food intake post-surgery. Thiamine deficiency can impact the cardiovascular and nervous system, causing dry or wet beriberi. In severe cases, WE or Wernicke's Korsakoff Syndrome (WKS) may develop, and the mainstay treatment for this is to administer thiamine to reverse mental changes and prevent disease progression. Despite thiamine replacement, WE and WKS is associated with high morbidity and mortality. Our patient is fortunate to have responded well to treatment.

CONCLUSION

Thiamine deficiency after sleeve gastrectomy may lead to severe neurological impairments. Proactive prophylactic thiamine supplementation can significantly decrease the likelihood of WE and WKS.

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BASELINE CHARACTERISTICS OF PARTICIPANTS IN THE MOLECULAR, METABOLIC AND NUTRITIONAL CHANGES AFTER METABOLIC SURGERY IN OBESE DIABETIC PATIENTS (MOMEN) STUDY

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INTRODUCTION

Metabolic surgery is proven to be effective in treating obesity-related conditions, including type 2 diabetes mellitus (T2DM). However, its impact on obese diabetic patients in Malaysia is not well understood. The MOMEN study aims to examine the molecular and metabolomic changes associated with diabetes remission in obese individuals with T2DM who undergo metabolic surgery. This paper presents the baseline anthropometric and cardiometabolic profiles of patients enrolled in the study.

METHODOLOGY

This study included 75 patients who underwent metabolic surgery in multiple hospitals and had a body mass index (BMI) of ≥ 25 kg/m² (obesity criteria defined by WHO/IASO/IOTF, 2000). Weight, height, and waist circumference (WC) measurements were obtained using a digital scale (SECA 813), a stadiometer (SECA 213), and a measuring tape (SECA 201), respectively. Fasting venous blood samples were analysed for HbA1c, uric acid, lipid, and liver profiles. Participants were categorised into three groups based on their HbA1c values (Malaysia Clinical