Adult E-Poster

showed a 12.01% increase (mean HOMA-IR 5.57 ± 1.16) (p <0.05), regardless of baseline adjustments. Within-group analysis also showed a significant reduction in HOMA-IR in the acupuncture group (from 6.08 ± 1.27 to 4.12±1.08, p <0.05). However, no significant between-group differences were observed in the prevalence of poor HOMA-IR post-intervention, possibly due to the short intervention duration and the shorter needle lengths used. No adverse events were reported, except for one case of mild pain at the needle insertion site.

CONCLUSION

Acupuncture may serve as an effective adjunct therapy for improving insulin resistance in patients with T2D. Future studies with extended treatment duration and longer needles are recommended to validate these findings.

EP_A210

CLINICAL OUTCOMES OF A MULTIMODAL APPROACH COMBINING LOW-CARBOHYDRATE DIET AND PHARMACOTHERAPY FOR OBESITY MANAGEMENT

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INTRODUCTION

Obesity and metabolic syndrome increase the risk of cardiovascular disease and type 2 diabetes. Effective weight management strategies are essential, including dietary modifications and pharmacologic interventions. This study evaluates the impact of a structured low-carbohydrate diet combined with pharmacologic therapy on metabolic parameters in patients attending the Low-Carb Clinic at Hospital Al-Sultan Abdullah, Universiti Teknologi MARA (UiTM), Puncak Alam.

METHODOLOGY

Forty-six participants (mean age 50 years, BMI 43.68 kg/m²) attended the clinic for 11.6 months. The intervention involved a low-carbohydrate diet (less than 130 g/day). Pharmacologic treatments included GLP-1 receptor agonists (Ozempic, Saxenda, Rybelsus, Trulicity) and weight loss agents (Duromine, Orlistat) in selected cases. Key assessments included anthropometric indices, glycaemic control, lipid and renal profiles, liver function tests, and blood pressure.

RESULT

The participants' mean age was 50 ± 12 years. 56.5% were female. Thirty-nine patients received GLP-1 receptor agonists; while twelve of them received other weight loss agents (Duromine and Orlistat), and two underwent bariatric surgery. Post-intervention, participants showed significant weight loss (mean -6.49 kg, p <0.01) and BMI reduction (-2.47 kg/m², p <0.01). Central adiposity decreased, including waist (-5.5 cm, p <0.01) and neck circumference (-1.8 cm, p <0.01). HbA1c dropped by 0.35% (p = 0.05). ALT decreased (-6.41 mmol/L, p = 0.011), indicating improved liver function. LDL increased by 0.36 mmol/L (p = 0.04), possibly due to increased fat intake. Fasting glucose, triglycerides, and blood pressure remained unchanged.

CONCLUSION

A low-carbohydrate diet combined with pharmacologic therapy, particularly GLP-1 receptor agonists, significantly improved weight, glycaemic control, and liver function. These findings support combining dietary and pharmacologic strategies for sustainable obesity management.

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SUCCESSFUL WEIGHT LOSS POST-BARIATRIC SURGERY: A RETROSPECTIVE STUDY

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INTRODUCTION

This study aims to determine the percentage of patients who achieved successful weight loss at 12 months post-bariatric surgery. Successful weight loss is defined as achieving at least 50% excess weight loss (EWL) within one to two years.

METHODOLOGY

We conducted a retrospective review on patients who underwent bariatric surgery at Hospital Raja Permaisuri Bainun Ipoh from 2015 to 2024. Patients' data were obtained from laboratory databases and medical records.

RESULT

A total of 298 patients underwent bariatric surgery between 2015 and 2024 in our center. Only 108 patients with weight recorded at month 12 post-operation were included in our