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

https://doi.org/10.15605/jafes.040.S1.218

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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.

EP_A211

SUCCESSFUL WEIGHT LOSS POST-BARIATRIC SURGERY: A RETROSPECTIVE STUDY

https://doi.org/10.15605/jafes.040.S1.219

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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

analysis, with 51.8% (n = 56) receiving sleeve gastrectomy (SG), 42.6% (n = 46) Roux-en-Y gastric bypass (RYGB), and 5.6% (n = 6) sleeve-plus procedure. The mean age was 41.79 years, with 81.5% females. 56.5% had hypertension, 33.6% diabetes mellitus, 38.9% obstructive sleep apnea, and 38% dyslipidaemia. The mean preoperative weight was 122.08 kg and mean BMI was 47.85 kg/m². Overall, 49.1% (n = 53) of patients achieved successful weight loss in 12 months, with percentage distribution as follows: 45.3% had RYGB, 47.2% had SG, and 7.5% had sleeve-plus procedure. At 12 months, 66.7% (n = 4) of sleeve-plus patients, 52.2% (n = 24) of RYGB patients, and 44.6% (n = 25) of SG patients had successful weight loss. However, no significant difference in success rates was observed among the three surgical procedures ($p = 0.484$). No other factor significantly impacted the outcome of successful weight loss.

CONCLUSION

Bariatric surgery effectively facilitates weight loss, with nearly half of patients achieving successful weight loss at 12 months. While the sleeve-plus procedure showed the highest success rate, differences among procedures were not statistically significant.

EP_A212

OUTCOMES OF RADIOACTIVE IODINE THERAPY IN HYPERTHYROID PATIENTS ON EXISTING STEROID THERAPY: A RETROSPECTIVE STUDY

https://doi.org/10.15605/jafes.040.S1.220

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INTRODUCTION

Radioactive iodine (RAI) is a common and effective treatment for hyperthyroidism. Corticosteroids are sometimes given as adjunct therapy for hyperthyroidism, or as treatment for thyroid eye disease (TED). Data is lacking on whether pre-existing steroid therapy affects the efficacy of RAI.

METHODOLOGY

We performed a retrospective review of thyrotoxic patients attending our clinic who underwent RAI between Dec 2017 and June 2024 and identified patients who were on corticosteroid therapy prior to RAI. Parameters including age, gender, diagnosis, steroid dosage, fT4, RAI treatment episodes and remission were evaluated. For patients who underwent multiple RAI treatments, only the first RAI treatment was evaluated. Remission was defined as euthyroid or hypothyroid status at least 6 months post-RAI, without the need for additional RAI treatment. Chi-squared test was performed to compare the remission rate with or without prior steroids.

RESULT

Four hundred fifty-two patients underwent RAI, 17 were on steroids. For the steroid group, the mean age was 41.8 ± 9.8 years. Graves' was the predominant diagnosis (76.5%). Mean fT4 pre-RAI was 18.4 ± 9.7 pmol/L, and mean prednisolone dose was 23.8 ± 9.3 mg. Indications for steroids included TED (41.2%), antithyroid drug allergy (17.6%), refractory Graves' (11.8%), agranulocytosis (11.8%), other autoimmune diseases (11.8%) and liver injury (5.9%). Patients with TED were often commenced on steroid therapy for two weeks pre-RAI.

Mean RAI dose was 20.2 ± 4.5 mCi for the steroid group and 17.8 ± 4.3 mCi for the non-steroid group ($p = 0.028$). Remission rate after first RAI treatment was 58.8% in the steroid group vs 73.6% in the non-steroid group. ($\chi^2 = 3.5$, $p = 0.06$)

CONCLUSION

We did not find any statistically significant difference in the post-RAI remission rates between the steroid and non-steroid groups. However, there was a trend towards reduced response to RAI in the steroid group. The study was limited by the small number of patients on steroids, and the difference in RAI doses used between groups. Analysis of a larger number of patients is warranted.

EP_A213

ALDOSTERONE-RENIN RATIO: ASSESSING APPROPRIATENESS IN DIAGNOSTIC PRACTICE

https://doi.org/10.15605/jafes.040.S1.221

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INTRODUCTION

Clinical guidelines recommend the aldosterone-renin ratio (ARR) as a screening tool for primary aldosteronism (PA); however, results may be influenced by pre-analytical factors such as posture, timing, salt intake, and medications.

METHODOLOGY

We conducted a retrospective evaluation of ARR requests at University Malaya Medical Centre from August 2022 to August 2024. The study aimed to determine testing indications, review interfering medications, and assess test