



RESULTS

Participants were 59.5% female, aged 47.1 ± 11.7 years, with a fasting glucose of 104.6 ± 10.4 mg/dL. Baseline insulin AUC was $13,005.8 \pm 6,895.2$ μ U/mL for GS200 and $13,233.8 \pm 8,268.9$ μ U/mL for placebo. At week 25, insulin AUC was reduced by $17.0 \pm 8.2\%$ in GS200 and increased by $5.0 \pm 8.0\%$ in placebo arms (mean difference: $-22.0 \pm 10.5\%$, $P=0.04$). Participants on GS200 had a greater reduction in postprandial insulin at T60 (-35.0 ± 13.1 vs. -1.5 ± 12.8 μ U/mL for placebo, $P=0.05$) and T120 (-30.9 ± 11.6 vs. 0.5 ± 11.4 μ U/mL for placebo, $P=0.04$), and a greater reduction in insulin Cmax vs. placebo (mean difference: -47.3 ± 21.1 μ U/mL, $P=0.03$). No significant differences were observed for postprandial glucose or HOMA-IR between arms.

CONCLUSION

Administration of GS200 in people with prediabetes significantly improved postprandial insulin secretion independent of weight loss.

PP-OL-11

RECURRENT HYPOGLYCAEMIA IN A PATIENT WITH TOTAL GASTRECTOMY

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CASE

A 56-year-old male hostel resident with a past history of spastic diplegic cerebral palsy was repeatedly admitted for hypoglycaemia since January 2021. Past medical history revealed that on August 2018 he had a 5 cm bleeding acute gastroduodenal ulcer which required total gastrectomy and duodenostomy. He had several admissions for severe symptomatic hypoglycaemia in 2021 (January, February, May, June, July). He denied history of over-the-counter medication or alcohol intake. He experienced hypoglycaemia after meals. Prolonged 75 g oral glucose tolerance test showed hypoglycaemia at 3 hours with a glucose level of 1.7 mmol/l and paired insulin of 4.3 mIU/l. Thyroid function test and 1 μ g short synacthen test results were normal. Urine toxicology was normal. He was referred to a dietitian on September 2021 and was given a trial of 2 tablespoons uncooked cornstarch (UCS) with water. He did not have any hospital admissions for hypoglycaemia since then. The home sugar monitoring showed capillary glucose mostly at 4-5 mmol/l, occasionally down to 2.9 mmol/l but not requiring admission.

The patient suffered from late dumping syndrome which is also seen in post-bariatric surgery patients. After sleeve gastrectomy or bypass surgery, as the undigested food has rapid transit to the small intestine, it stimulates release of gut hormones including glucagon-like-peptide 1 which causes hypoglycaemia. Dietary modification includes small frequent meals and increasing dietary fibre intake. The UCS has a low glycaemic index. It slows down the absorption of glucose and rise in blood glucose. If the patient fails dietary measure, acarbose, diazoxide and somatostatin analogue are the next steps. If the patient fails medical treatment, he may need surgical re-intervention such as pyloric reconstruction.

PP-OL-12

BEMPEDOIC ACID (ETC-1002) AS A NEW ALTERNATIVE TO STATIN THERAPY: AN UPDATED META-ANALYSIS AND SYSTEMATIC REVIEW WITH GRADE APPROACH

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OBJECTIVES

Bempedoic acid inhibits ATP-citrate lyase (ACL) two steps upstream of HMG-CoA reductase and may be recommended for patients who have not achieved LDL-C targets despite maximally tolerated or high-intensity statin therapy. Until now, there is no meta-analysis performed and this study intends to answer this question and to provide additional trials.

METHODOLOGY

Studies were searched using keywords: Bempedoic Acid or ETC-1002 and lipid in several databases of the Cochrane Central Register of Controlled Trials (CENTRAL), PubMed, ScienceDirect, and OVID. All references were reviewed using the Centre for Evidence-Based Medicine critical appraisal checklist. The descriptions of the extracted data are guided by the Preferred Reporting Items for Systematic Reviews (PRISMA) statement with GRADE approach. 4385 papers were initially collected, and twelve studies were pooled and entered review synthesis.