

sex, age, BMI, and 24 h sodium urinary excretion in a multivariate analysis, the association of PAI-1 OR 1.090 [1.044–1.137], $p < 0.0001$) and adiponectin OR 0.634 [0.519 - 0.775], $p < 0.0001$) with MetS remained significant. Multivariate analyses support a model where PAI-1 associate to waist_hip, SBP, DBP, and glucose (all $p < 0.0001$) and adiponectin associate to TG ($p=0.03$) and HDL-cholesterol ($p=0.0001$). **Conclusion:** PAI-1 and Adiponectin rendered the most robust associations with MetS components in a general population, indicating that unfavourable adipose tissue performance is a key contributor to these metabolic anomalies. Further prospective analyses should allow establishing whether these adipocytokines can anticipate the progress of MetS and cardiovascular risk. **Conflict of interest:** The authors declared no conflict of interest. **Funding:** This work was supported by Chilean grants CONICYT Fondo Nacional de Desarrollo Científico y Tecnológico, (FONDECYT) 1160695(CEF) and 1190419(RB); FONDECYT Post-doctorado 3200646(ATC); Millenium Institute of Immunology and Immunotherapy - ICM (P09/16-F)(AK-CEF).

Adipose Tissue, Appetite, and Obesity INTEGRATED PHYSIOLOGY OF OBESITY AND METABOLIC DISEASE

Renal Outcomes One Year After Metabolic Bariatric Surgery: A Clinical Audit

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Introduction: Obesity increases the risk of incident chronic kidney disease (CKD), being one of the strongest risk factors for new-onset CKD even in the metabolically normal obese. Weight loss has been shown to reduce renal hyperfiltration and proteinuria. Metabolic Bariatric Surgery (MBS) remains an effective treatment for obesity and its metabolic related complications. However, literature on its impact on long term renal function remains limited.

Methods: This was an observational retrospective study in a tertiary centre in Singapore. MBS cases performed at the centre between 2008 and 2019 were included. The primary outcome measure was estimated Glomerular Filtration Rate (eGFR), calculated using the CKD Epidemiology Collaboration equation, and albuminuria (defined as urine Albumin-Creatinine Ratio (uACR) >3.5 mg/mmol) at baseline and at one-year post surgery.

Results: 557 patients were included. Baseline parameters are as follows: mean age 41.7 ± 10.1 years; female 65.4%; ethnic composition: Chinese (35.2%), Malay (33.0%), Indian (26.9%); BMI 42.5 ± 7.9 kg/m²; glycaemic status: Diabetes Mellitus (34.5%), Pre-diabetes (13.5%), Non-diabetic (52.1%); Hypertensive status: Hypertension (55.2%), Pre-Hypertension (1.9%), Normotensive (42.9%). Median eGFR was 110.9 ($92.4 - 121.5$) mL/min/1.73 m² and median uACR was 1.00 ($0.40 - 3.55$) mg/mmol. At one-year post surgery, patients achieved statistically significant reductions in mean BMI (-11.3 ± 4.2 kg/m²), systolic BP (-3.24 ± 19.3 mmHg), diastolic BP (-5.23 ± 13.8 mmHg), fasting glucose (-1.95 ± 2.89 mmol/L) and improvement in HDL (0.29 ± 0.26 mmol/L). In addition, statistically significant reductions in the proportion of patients on anti-hypertensive (48.8% to 14.4%), anti-diabetic (34.1% to 12.7%) and lipid-lowering medications (37.8% to 20.4%) were seen. In particular, ACE-inhibitor and/or angiotensin receptor blocker (32.9% to 9.2%, $p < 0.001$) usage was reduced. At one-year post surgery, median eGFR increased by 1.66 mL/min/1.73 m² ($p < 0.001$). Further stratification by glycemic status showed significant increases in GFR in patients without diabetes or pre-diabetes. There was a decrease in median uACR (0.30 mg/mmol, $p=0.001$) at one-year post surgery; this remained statistically significant in patients with diabetes and pre-diabetes. 12.9% of patients had improvements in CKD staging. The proportion of patients with albuminuria decreased from 24.8% at baseline to 1.89% one-year post surgery ($p < 0.001$).

Conclusions: Metabolic bariatric surgery had a positive impact on renal function as shown by the improvement in eGFR in the non-diabetic group, and the reduction in albuminuria in the diabetes and pre-diabetes group at one-year post surgery. More adequately powered, longer-term data is required to investigate the durability of this impact.

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Safety and Tolerability of Concomitant Administration of Multiple-Dose AM833 With Semaglutide 2.4 MG for Weight Management

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Background: Combining weight management medications with different modes of action may provide more effective treatment options for people with obesity. Subcutaneous (sc) AM833, a long-acting amylin analog, and sc semaglutide 2.4 mg, a glucagon-like peptide-1 receptor agonist, are both under clinical development for weight management.