ONLINE-ONLY APPENDIX

Patient Characteristics

Each intervention group each contained one patient who had quit alcohol use in the past 6 months. Patients' parents, children, and siblings were considered first degree relatives. Rheumatologic disease was present in the metformin group (7 patients with osteoarthritis) and the non-metformin group (3 patients with osteoarthritis, 1 patient with rheumatoid arthritis). The average creatinine level in patients with renal failure in the metformin group was 161.5 +/- 39.5 μmol/L, and 173.6 +/- 32.8 μmol/L in the non-metformin group. Thyroid disease with replacement therapy was present in the metformin group (11 patients) and the non-metformin group (13 patients). The non-metformin group, also had 2 patients with untreated benign thyroid cysts and one patient with Hashimoto thyroiditis. Anemia was present in the metformin group (2 patients with iron deficiency anemia, 2 patients with anemia of chronic disease, and 1 patient with hereditary spherocytosis). Individuals with at least one prior diagnosis of cancer existed in the metformin group (colon (3), prostate (2), breast (1), vulvar dysplasia (1)) and the non-metformin group (colon (2), prostate (2), basal cell carcinoma (1), breast (1), thyroid (1), uterine (1)). Other conditions present in the metformin group of patients were hypertension (12), hyperlipidemia (5), thromboembolism (2), fibromyalgia (1), nephrolithiasis (1), benign prostatic hypertrophy (1), and a prior diagnosis of Cbl deficiency (1). Other conditions present in the non-metformin patient group were hypertension (17), hyperlipidemia (5), coronary artery disease (5), Morton's neuroma with resection (3), migraine (2), prior diagnosis of Cbl deficiency (2), nephrolithiasis (2), asthma (1), thromboembolism (1), depression (1), surgically treated lumbar spinal stenosis (1), osteoporosis (1), and prior resolved stroke (1).

Concomitant medications included statins, anticoagulants, angiotensin converting enzyme inhibitors or angiotensin receptor blockers, antidepressants, beta-blockers, proton pump inhibitors, calcium channel blockers, and other miscellaneous drugs. Their use was not different between metformin and non-metformin using patient groups. There was no difference in multivitamin use or Cbl injection status between groups; detailed dietary intake data was not tabulated.