Short term outcome of metabolic surgery in Hospital Fatimah Ipoh

Satkunan M, Jeevan S, Mok WK

Bariatric Unit, Hospital Fatimah Ipoh, Perak, Malaysia

ABSTRACT

Introduction: Metabolic surgery refers to surgical procedures that are carried out with the intention of inducing remission or reversing metabolic syndrome. Metabolic syndrome is a constellation of conditions that puts patients at risk of developing cardiovascular disease, cerebrovascular accidents, and type 2 diabetes mellitus as well as other serious conditions. It is characterised by a large waistline, high circulating triglycerides, high glucose levels and high blood pressure. Metabolic surgery is proven to reverse these conditions, particularly type 2 diabetes mellitus (T2DM). The common surgical procedures are sleeve gastrectomy, Roux-En-Y gastric bypass (RYGB) and one-anastomosis gastric bypass (OAGB). **Materials and Methods:** This is a retrospective study conducted in Hospital Fatimah Ipoh from May 2021 to May 2025. The records of all patients undergoing metabolic surgery were extracted and reviewed. The data was analysed according to the patient's preoperative demography, preoperative comorbidities, types of surgical procedures and postoperative outcomes. The post-operative outcomes that were reviewed were reduction in body weight, reduction of BMI and resolution of medical conditions. **Results:** A total of 32 patients underwent metabolic surgery from May 2021 to May 2025. Twenty-two had no medical conditions, while 10 had obesity-associated comorbidities. The comorbidities that were encountered are hypertension, T2DM, hyperlipidaemia, obstructive sleep apnoea, chronic kidney disease, infertility and osteoarthritis (OA). Thirteen patients had sleeve gastrectomy, eight patients had RYGB, seven had OAGB, two patients had revision sleeve to RYGB, and two patients had revision sleeve to OAGB. There was a 90% reversal in Type 2 diabetes, 100% remission in OSA, 80% in hypertension and 60% in hyperlipidaemia. One patient showed improvement in renal function with marked improvement in eGFR. Two patients with OA had their joint replacement deferred as they experienced improvement in their joints following weight loss. **Conclusion:** Metabolic surgery is rapidly becoming the treatment of choice for patients with metabolic syndrome and obesity-induced medical conditions. It is proven to have high success rates in reversing metabolic syndrome, particularly T2DM. Mechanisms that contribute to reversal and remission of T2DM are caloric restriction, re-routing of food into the distal small bowel, better intestinal adaptation, improved GLP-1 responses, enhanced incretin sensitivity and activity. Among the surgical procedures, the OAGB and the RYGB are found to have better long-term outcomes when compared to sleeve gastrectomy for metabolic syndrome. In addition to the above-mentioned procedures, newer surgical procedures that offer similar outcomes are sleeve plus procedures and single anastomosis duodenal ileal bypass. There are many studies that prove these surgeries to be superior to oral or injectable hypoglycaemic agents. The benefits of metabolic surgeries are clear and proven. It is no longer done purely for weight loss but more importantly for metabolic syndrome. When these surgeries are done early, it can potentially reduce the burden on the healthcare system, especially in treating complications resulting from metabolic syndrome.