Abstract
The prevalence of Type 2 diabetes mellitus (T2DM) has increased; as a result the number of patients with T2DM undergoing surgical procedures has also increased. This population is at high risk of macrovascular (cardiovascular disease, peripheral vascular disease) or microvascular (retinopathy, nephropathy or neuropathy) complications, both increasing their perioperative morbidity and mortality. Diabetes patients are more at risk of poor wound healing, respiratory infection, myocardial infarction, admission to intensive care, and increased hospital length of stay. This leads to increased inpatient costs. The outcome of perioperative glycaemia management remains a significant clinical problem without a universally accepted solution. The majority of evidence on morbidity and mortality of T2DM patients undergoing surgery comes from the setting of cardiac surgery; there was less evidence on noncardiac surgery and bariatric surgery. Bariatric surgery is increasingly performed in patients with severe obesity complicated by T2DM, but is distinguished from general surgery as it immediately improves the glucose homeostasis postoperatively. The improvements in glycaemia are thought to be independent of weight loss and this requires different postoperative management. Patients usually have to follow specific preoperative diets which lead to improvement in glycaemia immediately before surgery. Here we review the available data on the mortality and morbidity of patients with T2DM who underwent elective surgery (cardiac, non-cardiac and bariatric surgery) and the current knowledge of the impact that preoperative, intraoperative and postoperative glycaemic management has on operative outcomes.

Keywords