Obesity is a major public health problem. At present, the only available treatment offering sufficient weight-loss and metabolic benefits over time is surgery. Although bariatric surgery is considered to be safe, serious postoperative complications still occur. Given the large numbers of procedures performed, even low complication rates will result in serious morbidity to a large number of patients. It is thus important to reduce postoperative complications to a minimum. The focus of this thesis has been to identify factors associated with an increased risk for early postoperative complications after laparoscopic gastric bypass surgery and in a randomised clinical trial to evaluate mesenteric defects closure as a method to reduce the occurrence of small bowel obstruction.