Anesthetic Management of 186 morbidly obese patients for Bariatric Surgery

¹Minimally Invasive Surgery Center, Yotsuya Medical Cube, Tokyo, Japan ²Department of Weight Loss Sugery, Yotsuya Medical Cube, Tokyo, Japan

Toshie Shiraishi¹, Kazuko Sonoda¹, Eri Kikkawa², Tetsuya Nakazato², Hideharu Shimizu², Yosuke Seki², Yoshimochi Kurokawa¹, Kazunori Kasama²

BackgroundWe have experience of anesthetizing 186 morbidly obese patients for Bariatric Surgery of which 50 patients had Laparoscopic Roux-en-Y Gastric Bypass (LRYGB), 41 patients had Laparoscopic Sleeve Gastrectomy with Duodenojejunal Bypass (LSG/DJB), 78 patients had Laparoscopic Sleeve Gastrectomy (LSG), and 17 patients had Laparoscopic Gastric Banding (LAGB) between June 2006 and October 2010. We retrospectively evaluated the background of patients, pre-operative complications (such as airway difficulties, intra-operative events, duration of anesthesia and the operation) and some other points. ResultMean age and body mass index of the patients were 38 years ±10 years and 44 kg/m2±9 kg/m2. As for pre-operative complications, there were 83 patients (44%) with hypertension, 83 patients (44%) with Diabetes Mellitus, 88 patients (47%) with Sleep Apnea Syndrome (Apnea Hypopnea Index>20), 26 patients (14%) with asthma, 34 patients (18%) with a mental disorder such as depression. Using the Mallampati Classification (evaluation for difficult laryngoscopy), 29 patients (16%) were class III or IV which predicted difficult laryngoscopy. We performed conscious endotracheal tube intubation on 7 patients (5%). Anesthetic agents used were basically 02-Air-Sevoflurane with added propofol, fentanyl, and remifentanyl. During the operations, a severe decrease in Sp02 or blood pressure and deadly arrhythmias did not occur in any patient. Delayed wakening was also not found and all extubations were performed in the operating room. There was one patient that just after the extubation, experienced a very low level decrease in Sp02 but recovered immediately. There were no re-intubation patients after the surgery. ConclusionThere were no anesthetic problems or complications in any patients. There are many important risks or caring points concerning anesthesia for morbidly obese patients, but the biggest issue seems to be the respiratory management. In addition, there are some unclear issues which we should discuss more such as fluid therapy and drug dosing.