Laparoscopic Roux-en-Y gastric bypass in adolescents with severe obesity: a prospective five-year Swedish nationwide study (AMOS)

Today, while the rates in the prevalence of obesity are increasing, it is also important to note that the mean age of onset of obesity has decreased, subsequently shifting forward the age of onset of obesity-related diseases such as type 2 diabetes. While non-surgical programmes remain the gold-standard for the treatment of childhood and adolescent obesity, their efficacy seem to be limited. Increasingly, surgery is being performed and recommended as a treatment options as promising results are starting to emerge. The objective of this study was “to report outcomes over 5 years in adolescents following Roux-en-Y gastric bypass (RYGB) or conservative treatment in a Swedish nationwide prospective non-randomised controlled study, with an additional matched adult comparison group undergoing RYGB.”

Eligibility criteria for the adolescent surgical group included being “between 13 and 18 years, have a BMI ≥40, or ≥35 kg/m² with comorbidity, pubertal Tanner stage > III, height growth velocity beyond peak, and at least 1 year in a formal, conventional weight loss programme.” Primary outcome was defined as change in weight across 5 years. Overall, across 5 years, mean BMI changes was -13.1 kg/m² in the surgical group, + 3.3 kg/m² in the control group and -12.3 kg/m² in the adult group. Additionally, 37% of the surgical group patients, 3% in the control group and 40% in the adult group no longer had obesity. The research therefore concluded that “RYGB results in substantial weight loss, frequent resolution of cardiometabolic comorbidity and improvement in quality of life into the long-term in adolescents suffering from severe obesity.” However, it should also be noted that the surgical treatment options also led to an increase number of future surgical interventions as well as nutritional deficiencies. While the literature is getting more robust to support the integration of surgery as a formal treatment option for adolescents, it is also “crucial that adolescent bariatric surgery is performed within appropriate specialist multidisciplinary programmes, designed specifically to accommodate adolescent patients and provide long-term follow-up and support.”