Background: Laparoscopic Roux-en-Y gastric bypass (LRYGB) can dramatically ameliorate type 2 diabetes mellitus (T2DM) in morbidly obese patients. However, little evidence supports the effectiveness of LRYGB in normal weight patients.

Methods: After getting E-Da IRB approval, twelve normal weight patients with T2DM underwent LRYGB. Data, including patient demographics; BMI; co-morbidities; and details of diabetes mellitus, including disease duration, family history, medication use, and remission were prospectively collected and analyzed.

Results: The mean age of 5 men and 7 women was 51 years (range, 35-65 years); mean BMI, 23.6 (range, 22.9-24.7 kg/m²); and mean duration of T2DM onset was 11 years (range, 3-20 years). Mean operation time was 89 min (range, 46-229). Mean hospitalization was 2 days (range, 1-4). There was no mortality. One patient received laparoscopic repair of Peterson’s defect due to symptoms from internal hernia 6 months later after surgery. The result of diabetic remission would be reported.

Conclusions: In this preliminary report, LRYGB is safe in normal-BMI Diabetic patients; result of long-term follow up for diabetic remission is expectable.