

### 711 Effect of Roux-En-Y Gastric Bypass on HbA1c As Well As Number of Medications in Diabetic Patients

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**Aim:** Roux en Y gastric bypass (RYGB) is known to ameliorate Type 2 Diabetes Mellitus (T2DM) in morbidly obese patients. We aimed to determine both the reduction in the glycosylated haemoglobin (HbA1c) and the number of anti-diabetic medications (including insulin) in diabetic patients undergoing RYGB over a five-year period.

**Method:** We reviewed data of diabetic patients (n=530) who underwent RYGB from January 2012 – December 2017, including those with a minimum of a 2-year post-operative follow up (n=47). Preoperatively, BMI, HbA1c and the number of anti-diabetic medications and the duration of T2DM since diagnosis were recorded. These measurements were repeated at the end of the two year follow up.

**Results:** At the time of enrolment in the bariatric programme, the median BMI was 42.5 (range, 31.7-61.5) kg/m<sup>2</sup>, mean duration of T2DM was 58 months and median HbA1c was 59 (37-118) mmol/mol. The mean number of anti-diabetic medications taken, including insulin, was 2. At the end of 2-year follow-up, the median BMI was 32 (range, 24-41) kg/m<sup>2</sup> and HbA1c was 41(range, 33-91) mmol/mol. 15 patients (31.9%) still required anti-diabetic medication, 12 of whom had a diagnosis of T2DM for 3 years or more at time of enrolment.

**Conclusions:** RYGB is strongly associated with a resolution of T2DM in morbidly obese patients. In those who were not resolved, the number of anti-diabetic medications taken and HbA1c were reduced. The impact of the surgery is dependent on the duration of T2DM since diagnosis preoperatively.