

## XXXVIII COMU 2019 – Congresso Médico Universitário da FMUSP

### Researches Classified – Oswaldo Cruz Award – Surgical Area

#### **Postoperative evolution of insulin sensitivity in diabetic patients: sleeve gastrectomy vs Roux-en-Y gastric bypass**

**Rafael Gomes de Melo D'Elia, Roberto de Cleve, Filippe Camarotto, Miller Barreto, Iago Oliveira Ferradans, Kleber Jessivaldo Gomes das Chagas, Marco Aurélio Santo**

Faculdade de Medicina FMUSP, Universidade de São Paulo, São Paulo, SP, BR

The purpose of this study was to compare postoperative evolution of insulin sensibility in diabetic patients after the two most relevant bariatric surgeries nowadays, Roux-en-Y gastric bypass (RYGB) and sleeve gastrectomy (SG). A retrospective cohort study was conducted with type 2 diabetic patients, who underwent RYGB or SG from 2013 to 2018. The laboratory and anthropometric data was analyzed pre-surgery and during a 2-year follow-up. The tool chosen for this comparison was the HOMA2 nonlinear equations, calculated from fasting glycemia and blood insulin. The two surgical procedures were compared. There was significant difference between both evolutions in the first 6-months follow-up ( $p=0.029$ ), but no difference was presented at the 1-year ( $p=0.053$ ) or at the 2-year follow-up ( $p>0.05$ ). Therefore, there was no long-term difference between surgeries, which fuels discussions about their mechanisms of action and their relevance in the treatment of insulin resistance.

**Keywords:** Roux-en-Y gastric bypass; Insulin resistance; Bariatric surgery; Type 2 diabetes; Obesity.