

# BOOK OF ABSTRACTS

8<sup>TH</sup> MEETING OF YOUNG RESEARCHERS  
OF UNIVERSITY OF PORTO



# Insulinresistance in patients undergoing bariatric surgery

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**Background:** Obesity has become an epidemic worldwide and is associated to the development of various diseases such as diabetes mellitus type 2. In 2014, the overall prevalence of DM2 was estimated at 8.3% of the adult population and 23% of patients morbidly obese have DM2 associated. Compared to conventional treatment, bariatric surgery appears to be a viable option for the treatment of severe morbidities associated with obesity, such as type 2 diabetes.

**Aim:** To evaluate the evolution of Insulin Resistance in patients undergoing bariatric surgery.

**Methods:** Retrospective analysis of medical records and collection of demographic, anthropometric and clinical and 145 patients who attended the Multidisciplinary Assessment Consultation for the Surgical Treatment of Obesity of Hospital de São João, E.P.E., with primary diagnosis of obesity submitted to gastric banding, Sleeve or Bypass. Patients were split by groups of diabetic and without diabetes. Insulin resistance was measured with Quiki, Homa-IR and Glucose/ Insulin ratio.

**Results and conclusions:** In the pre-surgery time the patients median of Body Mass Index was 44,8 kg/m<sup>2</sup> for diabetic patients and 42,9 kg/m<sup>2</sup> for non diabetic. There is a steady decrease in this parameter up to 18 months after surgery. After the surgery, the proportion of patients with IR decreased, as well as the proportion of patients taking diabetes medication.

**Keywords:** Insulin Resistance, Bariatric Surgery, type 2 diabetes, HOMA-IR, Quiki, Glucose / Insulin ratio.