

Short Paper of Distinction

Abstract citation ID: znac246.013

SPOD1

Effect of BMI on Safety of Bariatric Surgery during the COVID-19 pandemic, Procedure Choice, and Safety Protocols – an analysis from the GENEVA Study

Rishi Singhal¹, Islam Omar², Brijesh Madhok³, Christian Ludwig⁴, Abd A Tahrani⁵, Kamal Mahawar^{6,7}

¹Upper GI unit, University Hospital Birmingham NHS Foundation Trust, UK

²General Surgery Department, Wirral University Teaching Hospital NHS Foundation Trust, UK

³Upper GI unit, University Hospital of Derby and Burton NHS Foundation Trust, UK

⁴Institute of Metabolism and Systems Research, College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK

⁵Institute of Metabolism and Systems Research, College of Medical and Dental Sciences, University of Birmingham, Birmingham, UK; Centre for Endocrinology, Diabetes, and Metabolism, Birmingham Health Partners, Birmingham, UK; Department of Diabetes and Endocrinology, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK

⁶Bariatric Unit, South Tyneside and Sunderland NHS Foundation Trust, Sunderland, UK

⁷University of Sunderland, UK

Background: It has been suggested that patients with a Body Mass Index (BMI) of $>60 \text{ kg/m}^2$ should be offered expedited Bariatric Surgery (BS) during the Coronavirus Disease-2019 (COVID-19) pandemic. The main objective of this study was to assess the safety of this approach.

Methods: We conducted a global study of patients who underwent BS between 1/05/2020 and 31/10/2020. Patients were divided into three groups according to their preoperative BMI - Group I (BMI $<50 \text{ kg/m}^2$), Group II (BMI $50\text{--}60 \text{ kg/m}^2$), and Group III (BMI $>60 \text{ kg/m}^2$). The effect of preoperative BMI on 30-day morbidity and mortality, procedure choice, COVID-19 specific safety protocols, and comorbidities was assessed.

Results: This study included 7084 patients (5197;73.4% females). The mean preoperative weight and BMI were $119.49 \pm 24.4 \text{ Kgs}$ and $43.03 \pm 6.9 \text{ Kg/m}^2$ respectively. Group I included 6024 (85%) patients, whereas Groups II and III included 905 (13%) and 155 (2%) patients, respectively.

The 30-day mortality rate was higher in Group III ($p=0.001$). The complication rate and COVID-19 infection were not different. Comorbidities were significantly more likely in Group III ($p<0.001$). A significantly higher proportion of patients in group III received Sleeve Gastrectomy or One Anastomosis Gastric Bypass compared to other groups. Patients with a BMI of $>70 \text{ kg/m}^2$ had a 30-day mortality of 7.7% (2/26). None of these patients underwent a Roux-en-Y Gastric Bypass.

Conclusion: The 30-day mortality rate was significantly higher in patients with BMI $>60 \text{ kg/m}^2$. There was, however, no significant

difference in complications rates in different BMI groups, probably due to differences in procedure selection.