

# ABSTRACT

**Background:** Obesity poses serious health consequences, and bariatric surgery remains the most effective and durable treatment. The goal of this study was to identify early changes in weight parameters, blood pressure, blood glucose level as well as lipid profile. A trial was made to correlate these changes with the degree of weight loss. Assessment of changes in health related quality of life (HRQoL) was also done.

**Methods:** A prospective Cohort study was done including 30 obese (BMI  $\geq$  40 or  $\geq$  35 with comorbidities). Results of investigations were statistically analyzed before and after surgery. A correlation study was made between lost weight and changes in blood pressure, blood sugar, serum lipids, and quality of life scores.

**Results:** A statistically significant reduction of body weight parameters occurred at 2 weeks and 3 months intervals postoperatively. Both systolic and diastolic pressures improved significantly. Twenty-one patients with hyperglycemia showed rapid improved, but post-prandial hyperglycemia returned in 12 of them 3 months later. As regards dyslipidemia, which was present in nearly 50 % of patients, lipid profile improved significantly in most of them. Quality of life scores showed marvelous improvement 2 weeks and particularly 3 months after surgery. There was a correlation between actual total body weight loss and percent change in cholesterol, triglycerides and HDL level, as well as fasting blood sugar. Highly significant correlation was found between percent changes in excess body weight and changes in quality of life score.

**Conclusions:** Bariatric surgery was followed by early significant changes in body weight parameters, improvement in blood pressure, blood sugar level as well as lipid profile. These changes entail a definite decrease in cardiovascular risk factors. An early improvement in Quality of life scores is quite evident.

**Key words:** Obesity, bariatric surgery, weight parameters, hypertension, hyperglycemia, lipid profile, Quality of life score.