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Estimate the Effect of Age Pre and Post Sleeve Gastrectomy on Liver Functions

Conflict of interest: nothing to declare.
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Abstract

Introduction. The obesity is markedly increasing in low-income and middle-income countries. Bariatric surgery has proven to be effective in treating obesity and its related diseases. The liver is the largest intracorporeal organ in the human body and plays a predominant role in several pivotal functions to maintain normal physiological activities.
Purpose. To demonstrate the effect of age on patients pre and post sleeve gastrectomy on liver functions.
Materials and methods. This study was conducted at Al-Basrah metabolic and Bariatric Surgery Centre, Iraq, from December 2021 to March 2022, on 52 patients with morbid obesity treated by sleeve gastrectomy. Patients were divided into three age categories and two groups according to the periods of their operation. The first group was collected before the operation, the second group was collected after six months of the operation.
Results. There is a significant reduction in BMI after 6 months in first and second categories of age, there was significant lower in ALT and ALP after 6 months in first and second categories of age. Regarding AST there is only significant reduction in the second category and there is a significant increase in INR in the first category.
Conclusion. The excess weight loss tended to increase with decreasing age, AST, ALT, ALP this enzyme levels before and after the surgery can provide insights into liver function and potential liver-related effects of the procedure and age have effect on INR level.
Keyword: sleeve gastrectomy, liver functions, bariatric surgery, middle-income countries, obesity, AST, ALT, INR