AB002. OP-2 Comparison of Magenstrasse and Mill gastroplasty and sleeve gastrectomy techniques as an experimental study on rabbits

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Background: Bariatric surgery is an important option when life-style modification, diet, and medical treatment are inadequate in lose weight. Bariatric surgical methods have gained popularity in recent years. In this paper, we compared the Magenstrasse and Mill (M&M) technique, with performing a simpler and more physiological type of gastroplasty without implanted foreign material such as band and reservoir, to the Sleeve Gastrectomy (SG). This study aimed to determine the effects of the M&M for obesity on the rabbits in comparison with the SG, which is accepted as a standard bariatric technique with creating a gastric tube.

Methods: The study was approved by the University of Van Yuzuncu Yil Regional Committee of Ethics (Institutional Animal Care and Use Committee). Twenty New Zealand Rabbits underwent operations. After prestudy with 2 rabbits, the remaining 18 rabbits were divided into 2 groups; Group 1 (SG) and Group 2 (M&M).

Results: Group 1 were observed to lose weight in all, while Group 2; 2 of them died, 5 of them lost weight, 2 of them gained weight. When the pre- and post-operative weight of the rabbits were compared; preoperative median weight values of 9 rabbits in Group 1 were significantly higher than postoperative values. On the other hand, there was no significant change in the mean weight of Group 2 of 7 rabbits (living up to 8 weeks). The mean weight of rabbits undergoing standard SG was significantly lower than the M&M technique.

Conclusions: We believe that this animal experimental study, which we conducted intending to compare M&M and SG techniques, will contribute to the literature as a pilot study and determine the survey of M&M technique as a pioneer in other studies.

Keywords: Bariatric surgery; Magenstrasse and Mill gastroplasty (M&M gastroplasty); sleeve gastrectomy

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Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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