



## Metabolic Changes After Laparoscopic Total Gastric Vertical Plication

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### Dear Editor,

We read with much interest the publication by Golpaie *et al.* (1) on metabolic changes in lipid parameters and insulin resistance after laparoscopic total gastric vertical plication (LTGVP). They performed LTGVP in 15 severely obese patients and measured lipid profiles and parameters of glucose homeostasis before and six weeks postoperatively. Patients lost an average of 14.7% of total weight in the first six weeks after the operation. Interestingly, reduction of triglycerides and LDL was statistically significant after six weeks and reduction of homeostatic model assessment (HOMA) index as well. On the other hand, total cholesterol, LDL, fasting glucose, insulin levels and the quantitative insulin-sensitivity check index (QUICKI) did not change significantly.

The authors conclude, that LTGVP is an “effective therapeutic approach for obese patients because it reduces weight, insulin resistance and improves metabolic parameters”. Literature about this new bariatric technique

is scarce, especially long-term data is missing. It has to be mentioned that this is the first study to report metabolic changes, especially lipid profiles in patients undergoing this new bariatric surgical procedure. Although the follow-up is only six weeks, the improvement in triglyceride and LDL levels is remarkable. Concerning excessive weight loss (EWL) another study by Ramos *et al.* describes a mean EWL of 62% (45% to 77%) in nine patients 18 months after gastric plication, which is comparable to other purely restrictive procedures (2). An article by Talebpour *et al.* analyzes the course of weight loss up to 36 months postoperatively. An EWL of 60% after 24 months (50 cases), and 57% after 36 months (11 cases) is reported (3).

Nowadays, it is at least throughout Europe widely accepted, that purely restrictive methods, i.e. gastric banding procedures, often fail in the long run. Most bariatric surgeons and metabolic physicians are convinced that besides the restrictive and malabsorptive components, concomitant metabolic effects play a pivotal role for the long-time results of weight loss (4). Therefore, as the next

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step, we would like to encourage the authors to measure meal induced profiles of gastrointestinal peptides like ghrelin, PYY, GLP-1 and cholecystokinin for example as well as adipokines and compare the results with established bariatric procedures like gastric bypass and sleeve gastrectomy (5, 6).

### Authors' Contribution

None declared.

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