The plicature of stapled line after vertical sleeve gastrectomy induces greater weight loss with use non-absorbable suture than with absorbable suture.

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Background: Both the final volume of the stomach and obtaining a perfectly tubular plasty seem crucial in long-term therapeutic efficacy and may lower the future incidence of gastric dilatation. Plicature of the stapled line with non-absorbable suture could play an important role. The aim of the study was to determine whether there were significant differences in the medium term weight loss in a group where absorbable suture was used versus another where non-absorbable suture was used.

Methods: The vertical sleeve gastrectomy was performed over a 32-French catheter, 4cm from the pylorus and the clips line was plicated and sutured. The first 52 patients had the suture carried out with absorbable suture material (monofilament Polyglycolic). Then, we changed our protocol and used non-absorbable suture (monofilament Polypropilen) for the following patients. All patients had a multidisciplinary team support of 17 months after surgery. **Results:** See table, distribution by sex/age, BMI, % EBMIL and %EWL in both groups. The results were markedly better for group B (non-absorbable suture), than for group A (absorbable suture).

	N	Age (range)	Sex M/F	Initial BMI (range)	17 m. BMI	17 m. %EWL	17 m. %EBMIL
Group A, absorbable (poliglicolic)	52	38 (18-58)	19 / 33	43 (36 - 49)	30.3	68 %	60 %
Group B, non-absorbable (polipropilen)	90	38 (19-55)	26 / 65	42,0 (36 - 49)	28.0	81 %*	70 %*

^{*}p<0.05

Conclusion:

Once again, final stomach volume and surgical technique seem have a key role in the mid-term results in the LVSG.

In our experience, the plication of the staple line with non-absorbable material improves the therapeutic efficacy of LVSG in the medium term.