

Additional fundophrenicopexia, after Nissen fundoplication, reduces postoperative dysphagia and re-operation rate in the long term follow up

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Introduction:

Various technical modifications of Nissen fundoplication (NF) aiming to improve patients’ outcome, have been discussed. Aim of this study was to evaluate the effect of division of the short gastric vessels (SGV) and the addition of a standardized fundophrenicopexia on the postoperative outcome after NF.

Methods:

Retrospective study of **283** patients undergone NF, that were divided into four groups following consecutive time periods:

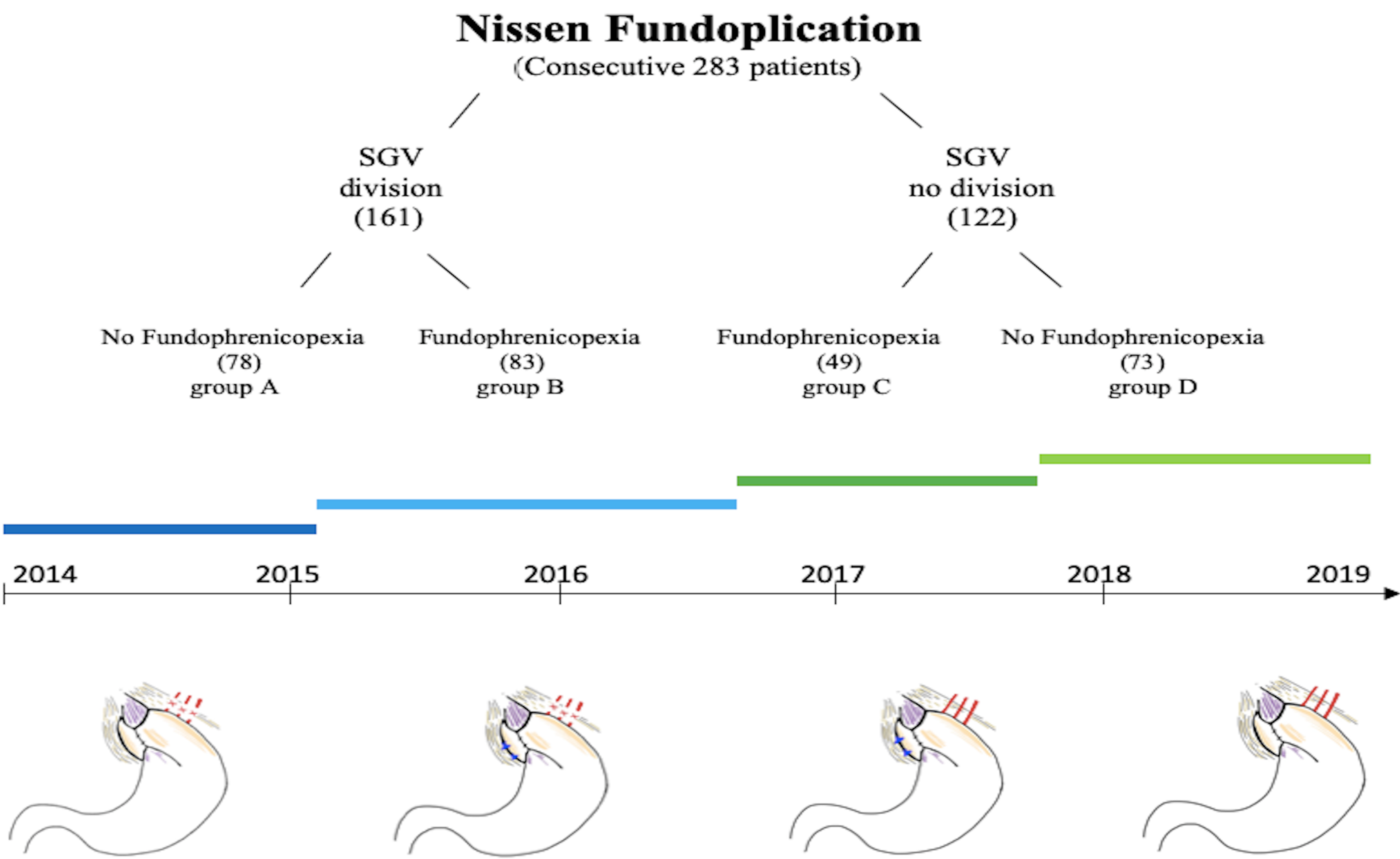
- Group A** - With division of the SGV, without fundophrenicopexia
- Group B** - With division of the SGV, with fundophrenicopexia
- Group C** - Without division of the SGV, with fundophrenicopexia
- Group D** - Without division of the SGV, without fundophrenicopexia

Results:

Fundophrenicopexia reduced postoperative dysphagia rates (0 group C vs. 5 group D, p=0.021) in patients where the SGV were preserved and reoperation rates (1 group B vs. 7 group A, p=0.017) in patients where the SGV were divided.

Postoperative side-effect rate at median follow-up of 5 years

	Division of SGV	No division of SGV	
Persistent dysphagia	6	5	p=0.873
Gas-bloat syndrome	19	16	p=0.740
Ability to belch/vomit	17	23	p=0.071
Intervention	3	3	p=0.567
Re-fundoplication	8	8	p=0.236



Conclusion:

- Standardized additional fundophrenicopexia in NF patients:
 - ↓ postoperative dysphagia in patients without division of the SGV
 - ↓ reoperation rates in patients with division of the SGV
- Division of the SGV has no influence on the postoperative outcome of NF