

Hill's antireflux procedure

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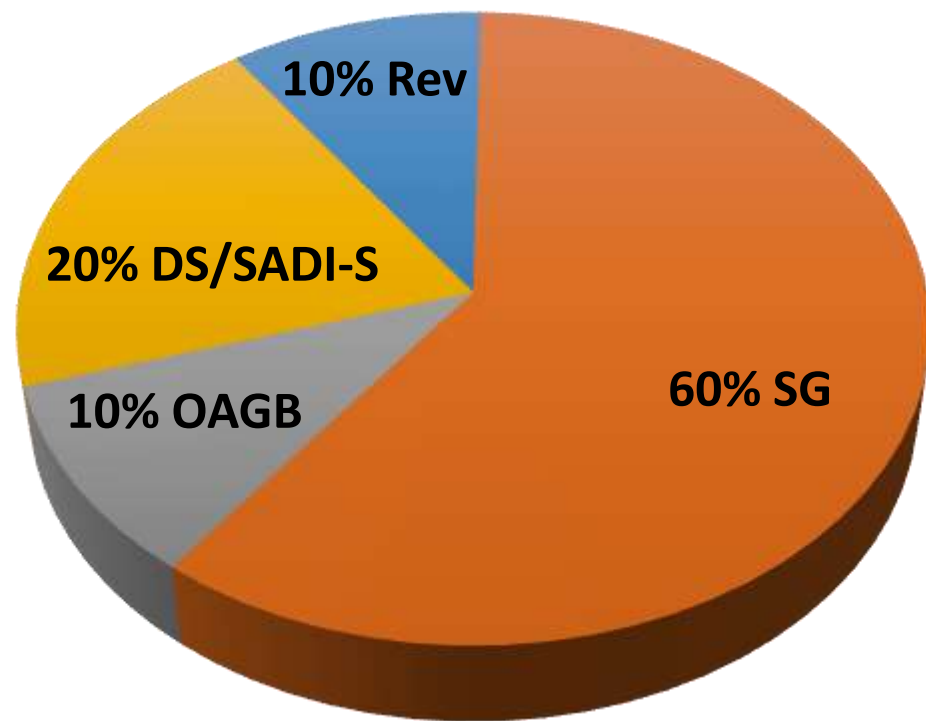
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I have no potential conflict of interest to report



CASE MIX



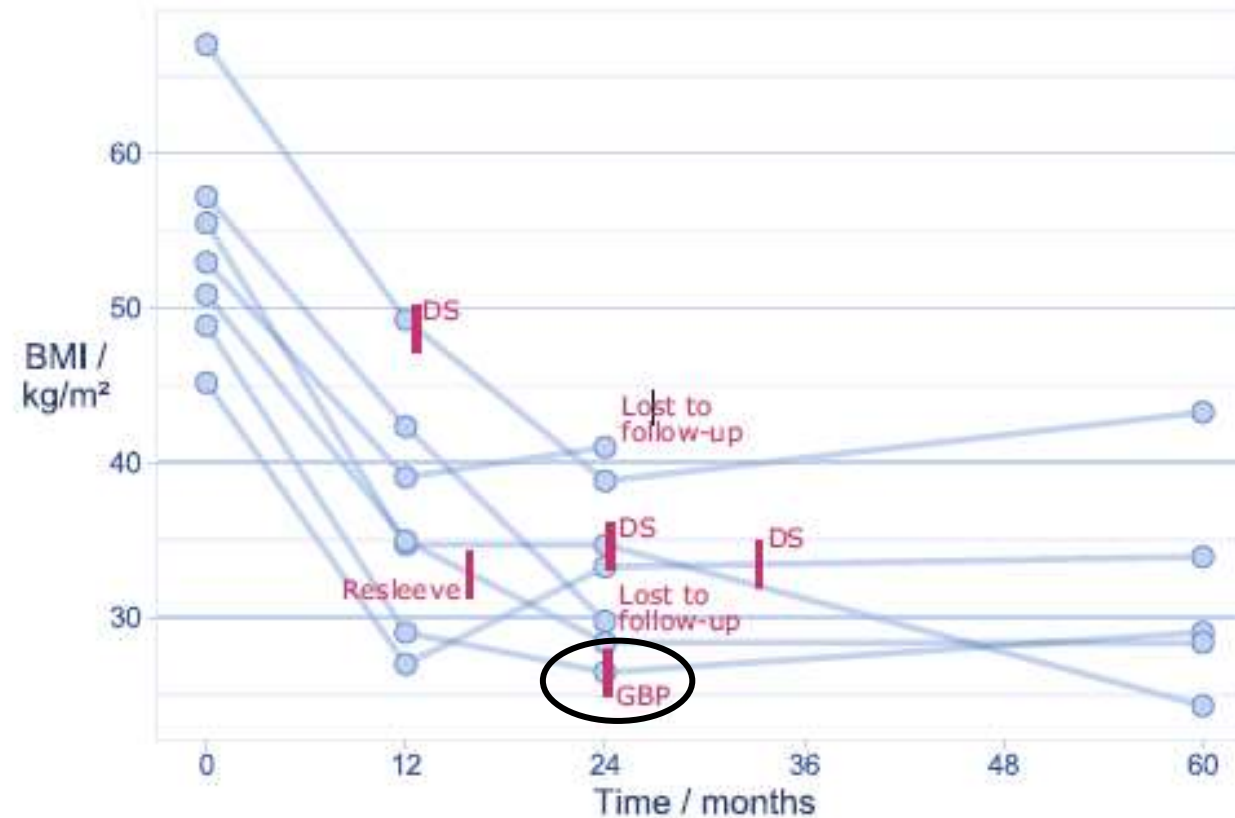
- RYGB
- SG
- OAGB
- DS/SADI-S
- REVISIONAL
- ENDOSCOPIC



Sleeve five year results: (n = 137/168 pts, f.u = 82%)

Weight loss: Mean Δ BMI = 15.7 / mean % TWL = 28.4

Revisions: 7/168 = 4.2% (6 due to obesity, 1 due to reflux):

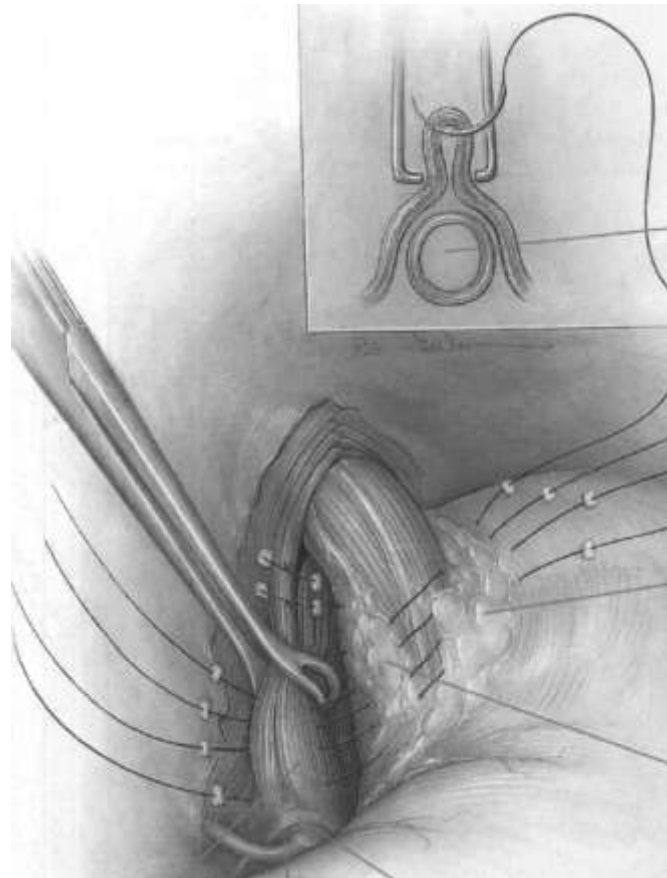


Sleeve converted to RYGBP for reflux (n=9)

After two years:

- 4/9 without PPI
- But also 2/9 had had a laparotomy due to acute abdominal pain:
 - One = no finding
 - One = small bowel ileus due to adhesions

Anatomy



Aorta

Phrenoesophageal bundle

Phrenoesophageal bundle

Preaortic fascia

Median arcuate ligament

Ref: Hill, Mazza, Aye: The Hill Repair, 1997

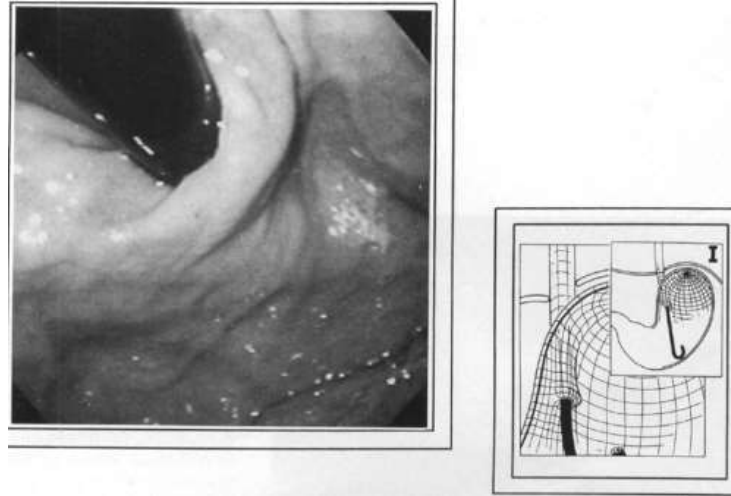
Hill's antireflux procedure

- First reported in 1967:

Calibration of LES and **posterior fixation of GEJ** below the diaphragm.

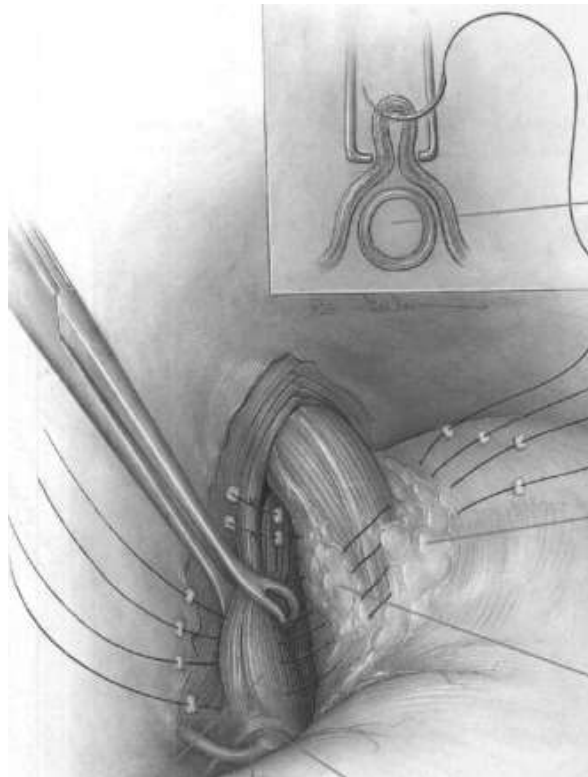
With laparoscopy:

- Added intraoperative endoscopy



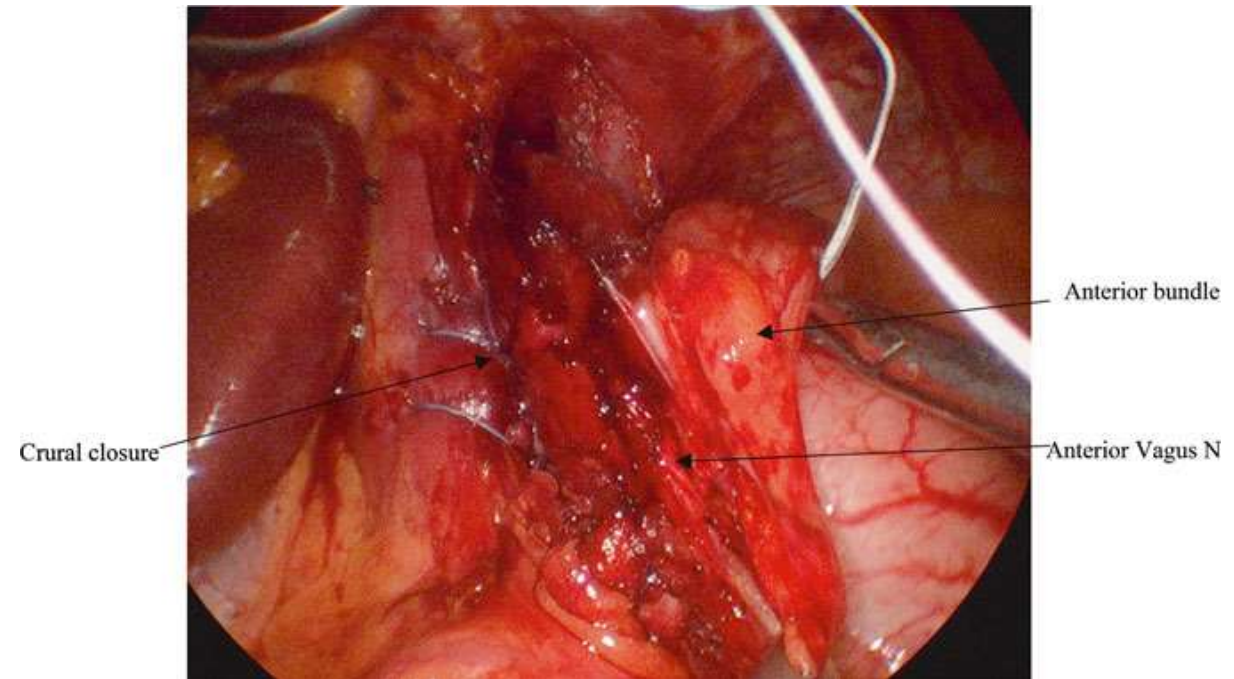
The Hill sutures

Four sutures:



Ref: Hill, Mazza, Aye: The Hill Repair, 1997

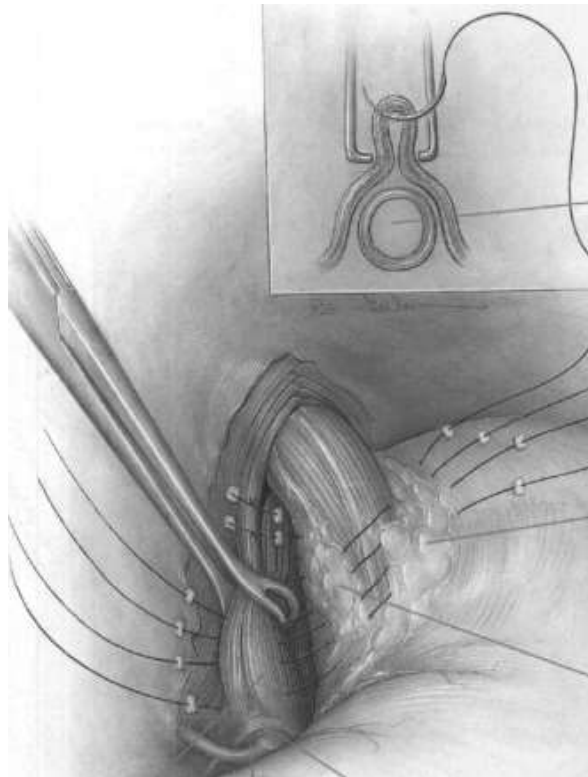
First suture, first stitch:



Ref: Swanstrøm, Dunst et al: Antireflux Surgery (2015), side 117 - 122

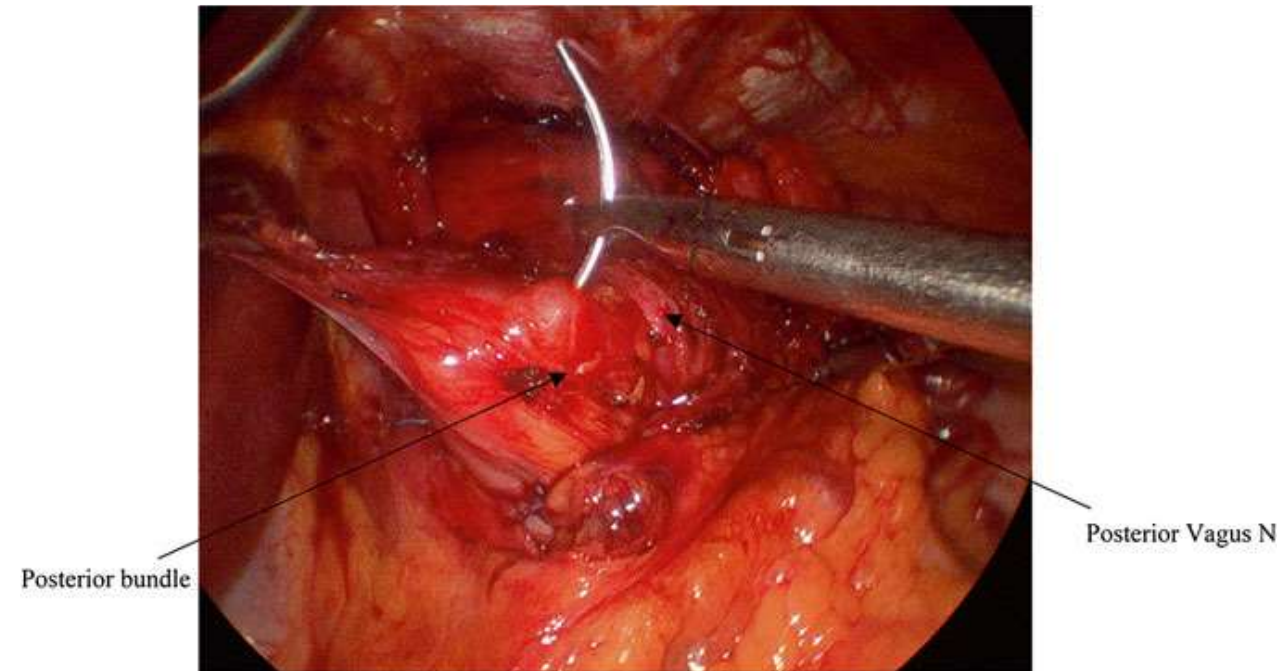
The Hill sutures

Four sutures:



Ref: Hill, Mazza, Aye: The Hill Repair, 1997

First suture, second stitch:



Ref: Swanstrøm, Dunst et al: Antireflux Surgery (2015), side 117 - 122



2-12 Anterior closure of the hiatus is performed now if necessary. A suture is placed from the anterior fundus wall (0 nonabsorbable, seromuscular) to the diaphragm to prevent a paraesophageal hernia. To accentuate the configuration of the valve a suture is placed between the fundus and the right crus. Finally 2 or 3 sutures are placed from the anterior gastric wall to right side of the preaortic fascia.



Success? (n=10, f.u. ≈ 2 yrs)

Defined as:	n = 10	Percent
Remains with sleeve without using PPI	5 / 10	50 %
Sleeve with low dose PPI (≤ 40 mg daily)	3 / 10	30 %
Revised to RYGBP	2 / 10	20 %
Sleeve with GerdQ skåre < 9	7 / 10	70 %
«Doing well with sleeve with or without PPI»	7 / 10	70 %

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Revised to RYGBP	2 / 10	20 %
Sleeve with GerdQ skåre < 9	? / 10	?
«Doing well with sleeve with or without PPI»	6 / 10 ?	60 % ?

Conclusions

- Promising results
- Be aware of details with the procedure
- First choice for surgical treatment of reflux after sleeve?
- Should be done by surgeons dedicated to oesophageal & antireflux surgery in departments where a vascular surgeon is available

Preop gastroskopi 03.11.20: Diafragma 38 cm, GØ-overgang 33 cm: HH = 5 cm. Ingen øsofagitt.



Hill's antireflux procedure

- First reported in 1967:

Calibration of LES and **posterior fixation of GEJ** below the diaphragm.

With laparoscopy:

- Added intraoperative endoscopy to access the GEV:
- 90% good to excellent result (n=307 pts)

Ref: Hill, Mazza, Aye: The Hill Repair, 1997

