Abdominal pain after RYGB- a technical preventable problem or just a “bypass problem”

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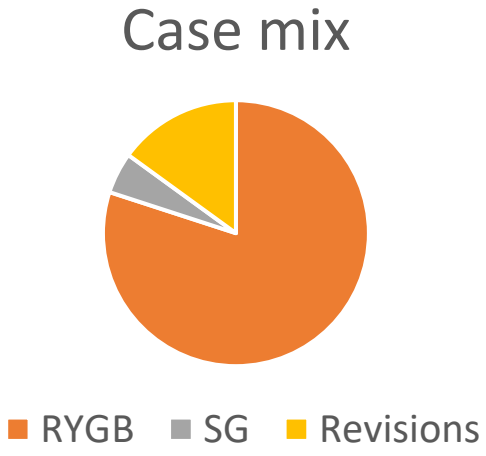
Disclosures

Advisory board- *Johnson & Johnson, NovoNordisk*
Education activities- *Johnson & Johnson, NovoNordisk, Sandoz*

Reimbursement to my academic institution



The bumpy history of laparoscopic RYGB

- The first widespread laparoscopic bariatric procedure
- Many surgeons learning curves
- Accumulation of patients with internal hernia (20%)
- Learning curves when closing mesenteric defects
- The juniors first performed the JJ

- **Today** > lap RYGB 2.0 in a mature MDT context

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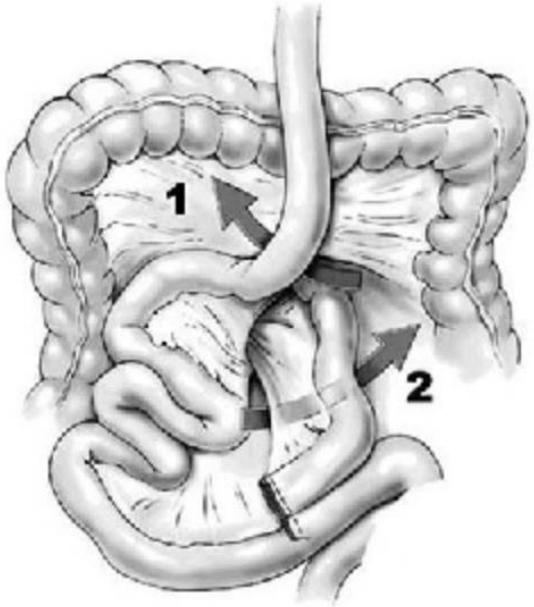
Internal herniation



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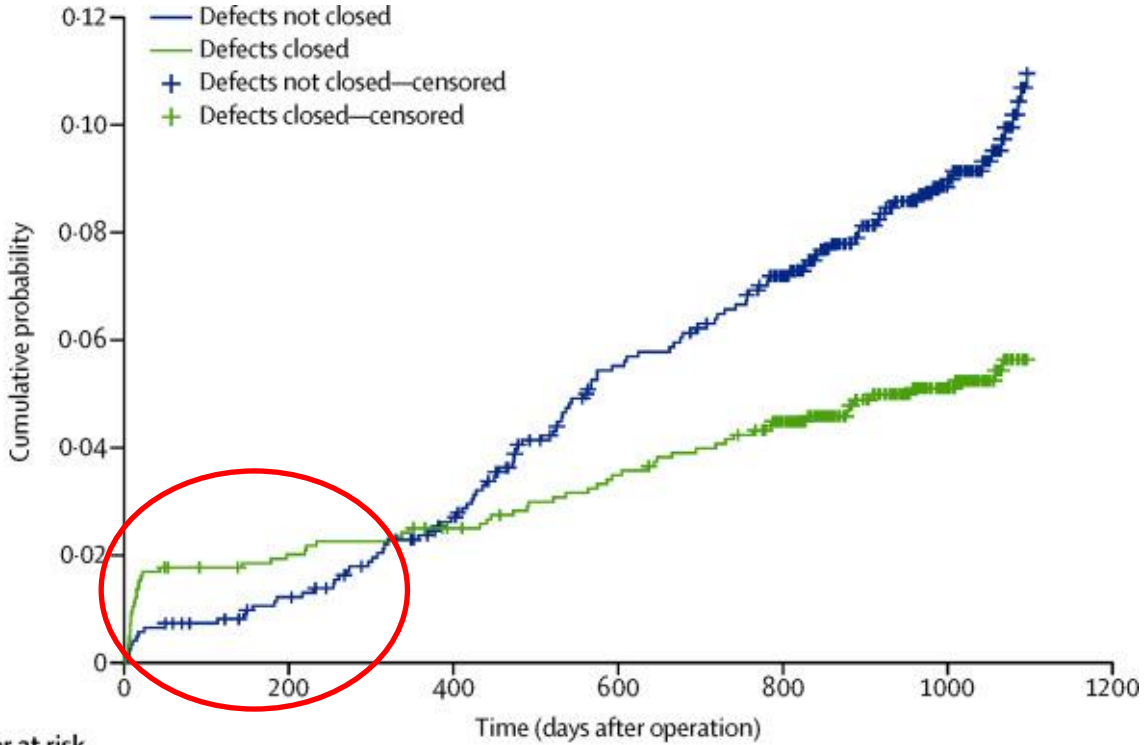
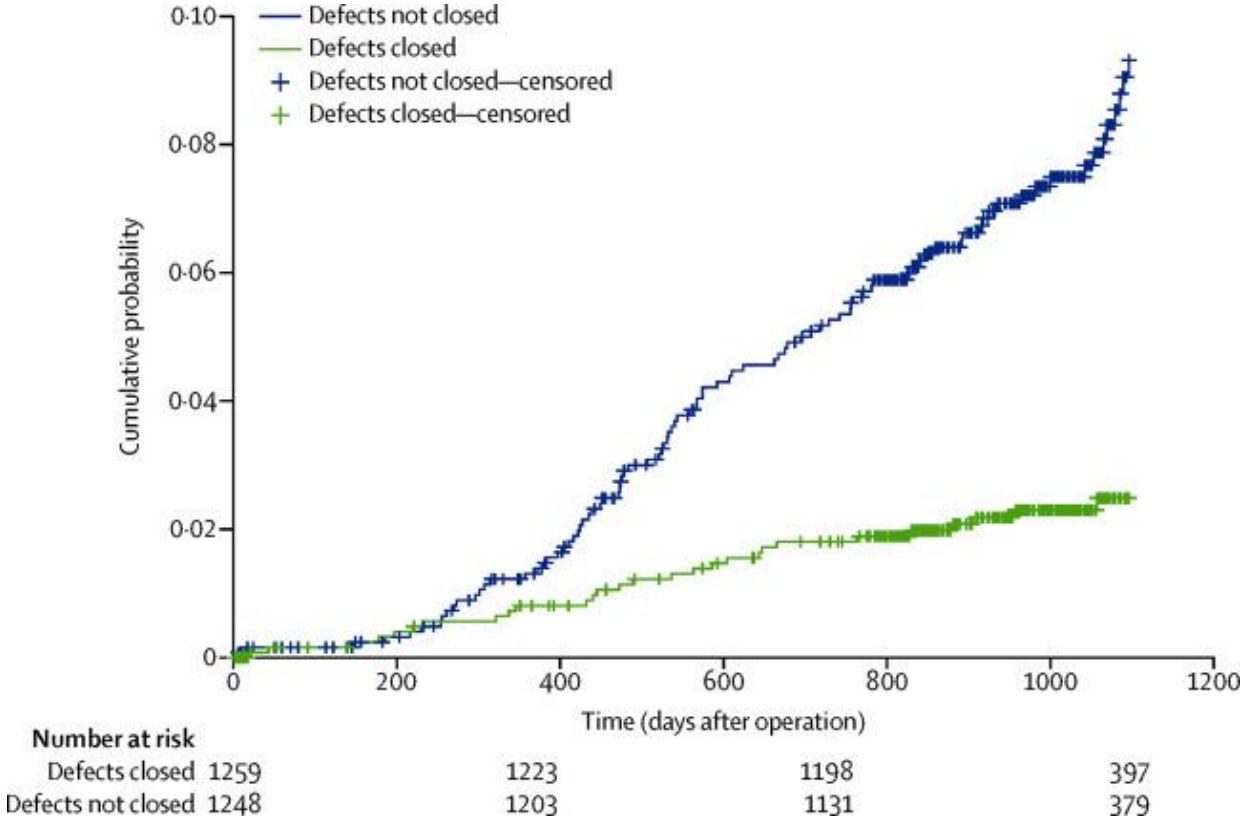


Number at risk				
Defects closed	1259	1223	1198	397
Defects not closed	1248	1203	1131	379

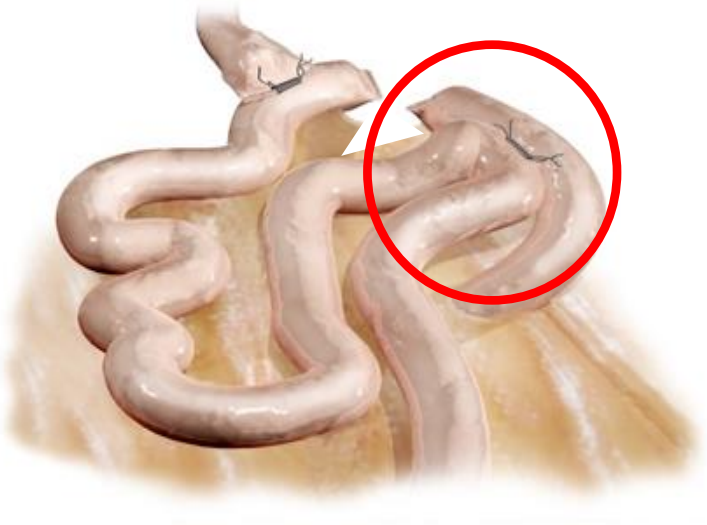
Stenberg et al, Lancet 2016



Stenberg et al, Lancet 2016

How do we identify those having problems arising from problems at the JJ?

Abdominal pain and/or vomiting are **NOT** normal after RYGB!



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Gastro-Intestinal Symptoms

	RYGB	Non-Surgical	RYGB 2y	Non-Surgical 2y	Mean diff
Diarrhoea	1·6 (1·2 to 2·1)	1·7 (1·3 to 2·1)	1·4 (1·0 to 1·8)	1·6 (1·1 to 2·0)	p= 0·854
Indigestion	2·6 (2·1 to 3·1)	2·6 (2·1 to 3·0)	2·3 (1·8 to 2·8)	2·1 (1·6 to 2·6)	p= 0·658
Constipation	1·4 (1·1 to 1·8)	1·7 (1·4 to 2·0)	1·6 (1·2 to 2·0)	1·5 (1·1 to 2·0)	p= 0·282
Abdominal pain	2·0 (1·6 to 2·5)	2·4 (1·9 to 2·8)	2·2 (1·7 to 2·7)	2·1 (1·6 to 2·7)	p= 0·387
GERD	2·2 (1·8 to 2·7)	1·9 (1·4 to 2·3)	1·3 (0·8 to 1·8)	2·1 (1·5 to 2·6)	**p= 0·02**

No difference between groups over 2y, except GERD

Unpublished

Symptoms when problem at EA (=JJ)

- Abdominal pain-
  (5-10 min after meal, gradually subsiding, upper left quadrant)

- Postprandial nausea/retching

- Often complex hypoglycaemia

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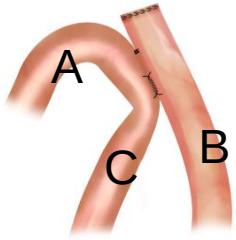
Dumping

- Part of the mechanism of action
- **NOT** all the time
- Too fast, too much, too much sugar or fat
- Not a “complication”, patients appreciate

Early dumping syndrome is not a complication but a desirable feature of Roux-en-Y gastric bypass surgery. Laurenius A, Engström M. Clin Obes. 2016 Oct.

Dysfunctional entero-anastomosis

not common, but also not uncommon..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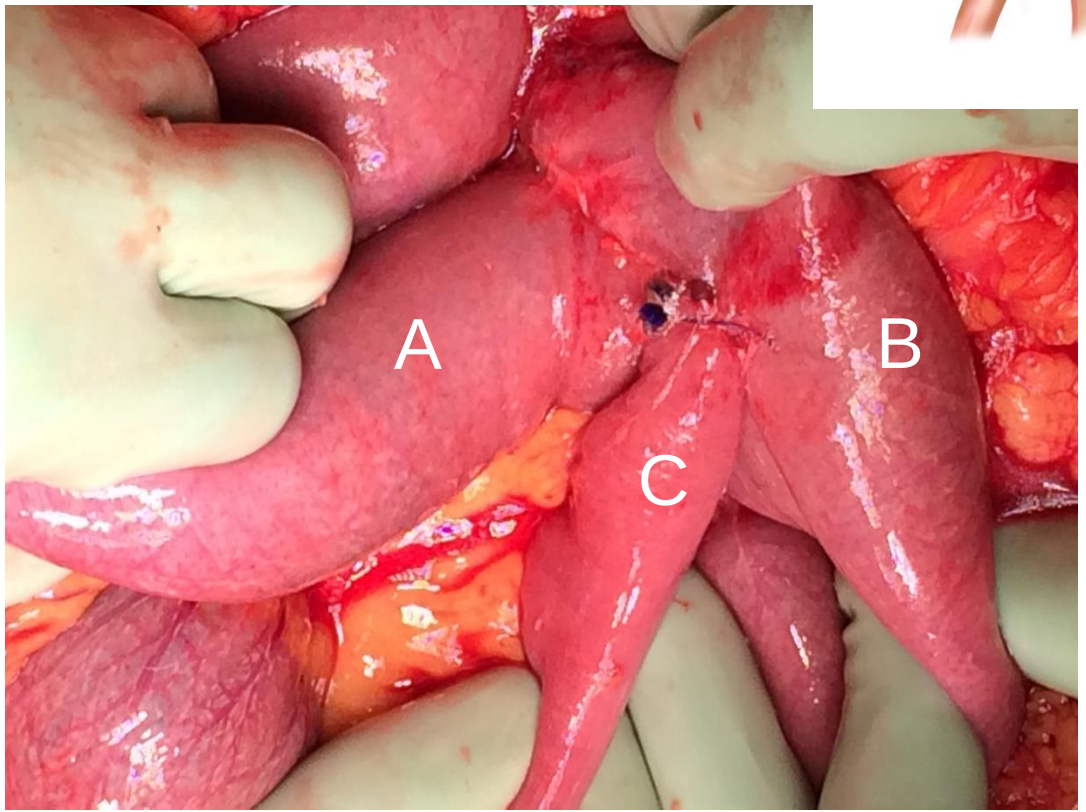
B
C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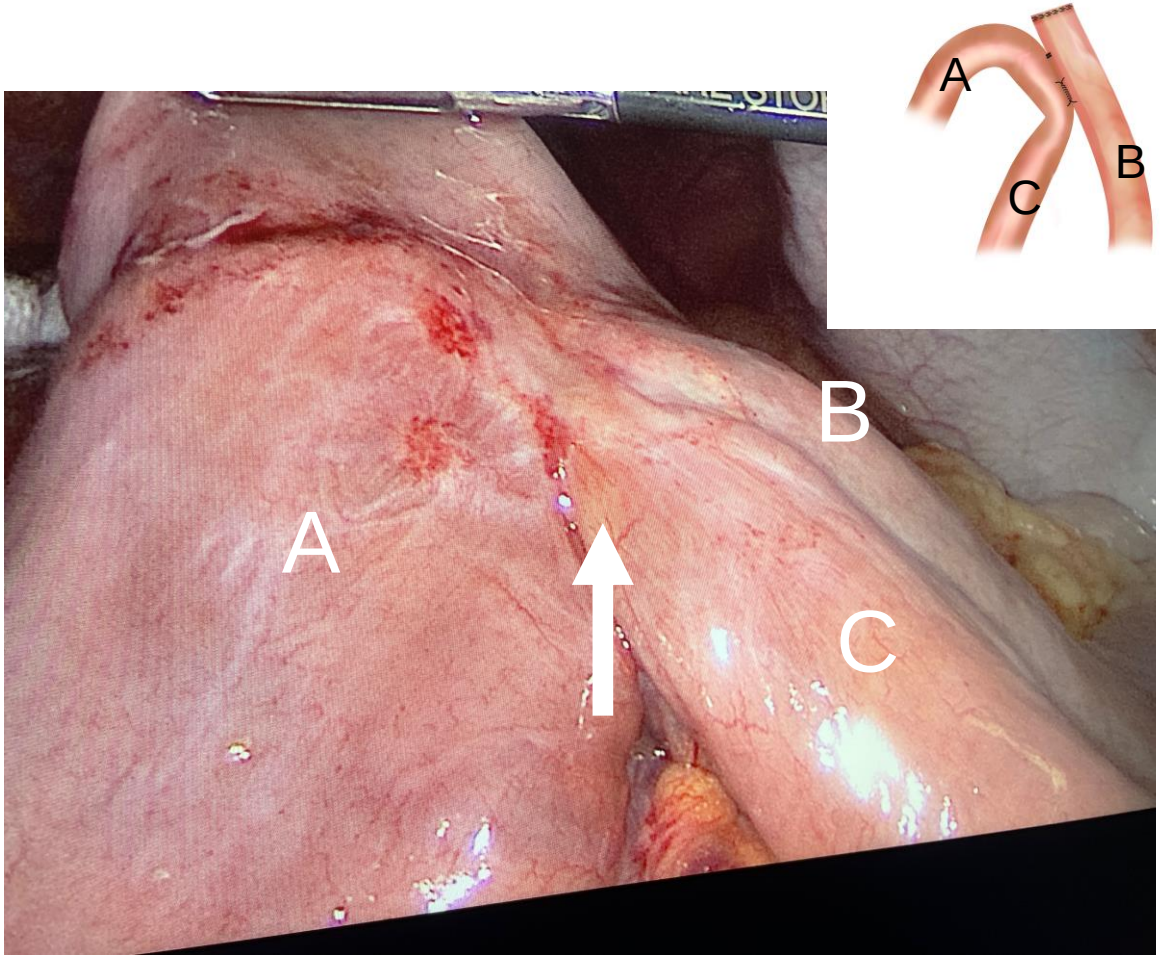
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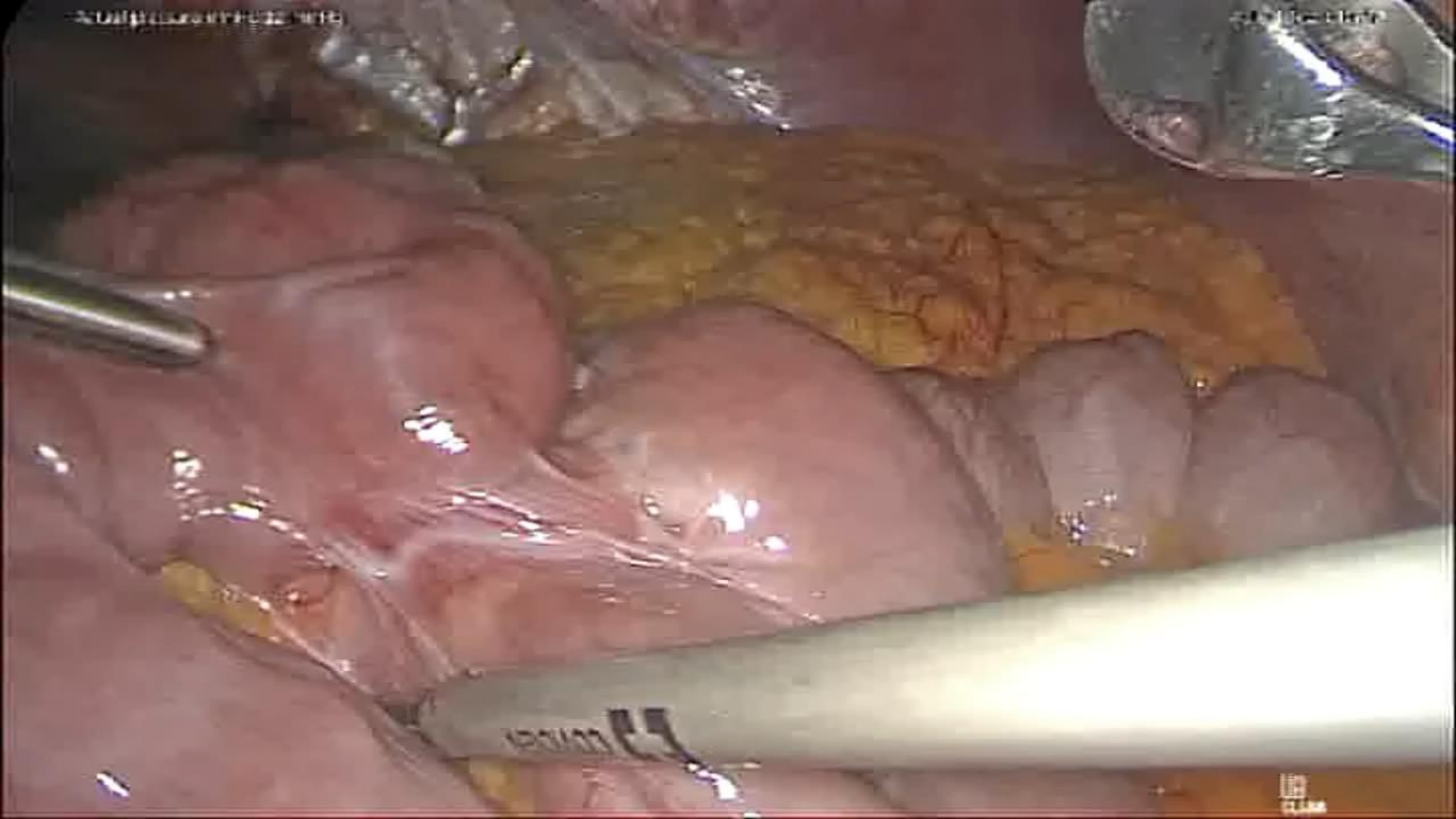

ELSEVIER

SURGERY FOR OBESITY AND RELATED DISEASES

Surgery for Obesity and Related Diseases 15 (2019) 1024–1028

Controversies in Bariatric Surgery

Possible relation between partial small bowel obstruction and severe postprandial reactive hypoglycemia after Roux-en-Y gastric bypass

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Abstract

Background: Although dietary treatment ameliorates symptoms in most patients with postbariatric hypoglycemia (PBH), there is a subgroup with severe symptoms that do not respond sufficiently to either diet or drugs. A clinical observation showed that those patients additionally experienced postprandial abdominal discomfort or pain.

Objectives: This report describes patients with severe PBH following laparoscopic Roux-en Y gastric bypass undergoing corrective surgery to alleviate partial small bowel obstruction (kink, adhesions, dysfunctional anastomosis) and the subsequent outcome regarding symptoms of PBH.

Setting: Sahlgrenska University Hospital, Sweden.

Methods: Retrospective analysis regarding hypoglycemic symptoms from medical records and a complementary telephone interview.

Obesity Surgery
https://doi.org/10.1007/s11695-021-05686-2

ORIGINAL CONTRIBUTIONS

The Jejunojejunostomy: an Achilles Heel of the Roux-en-Y Gastric Bypass Construction

Suzanne Hedberg[1,2] · Yao Xiao[1] · Adam Klasson[1] · Almantas Maleckas[1,3] · Mikael Wirén[4,5] · Anders Thorell[4,5] · Anna Laurenius[1] · My Engström[2,6] · Torsten Olbers[1,7]

Dr Suzanne Hedberg, MD, PhD

Problem at the JJ?

Retrospective study:
- medical charts,
- complementary
- telephone interviews

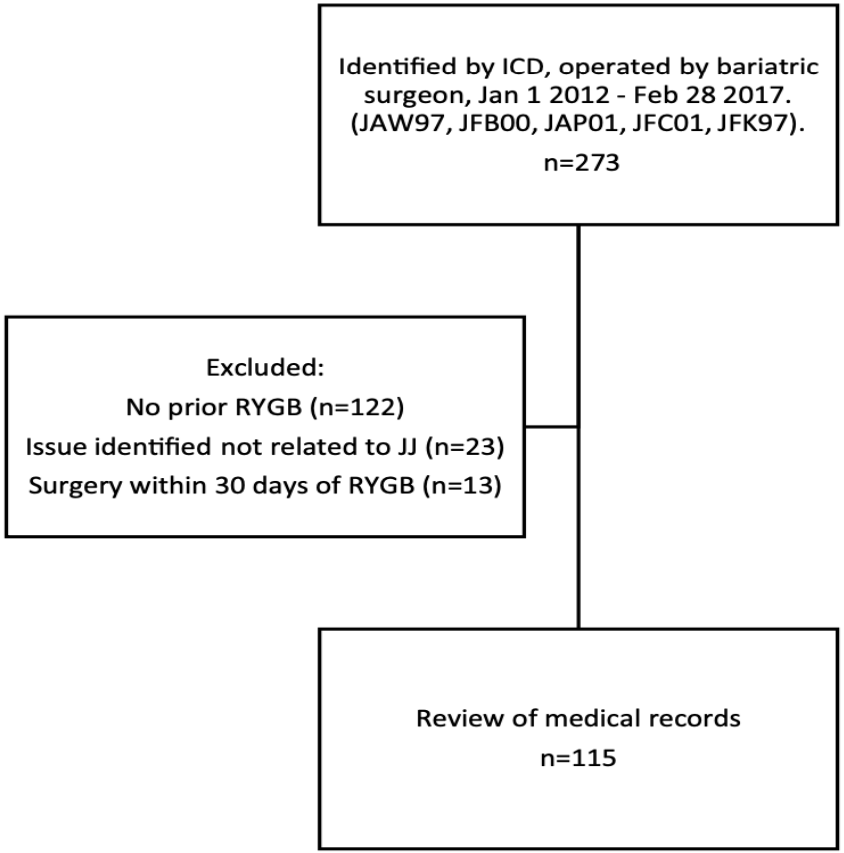
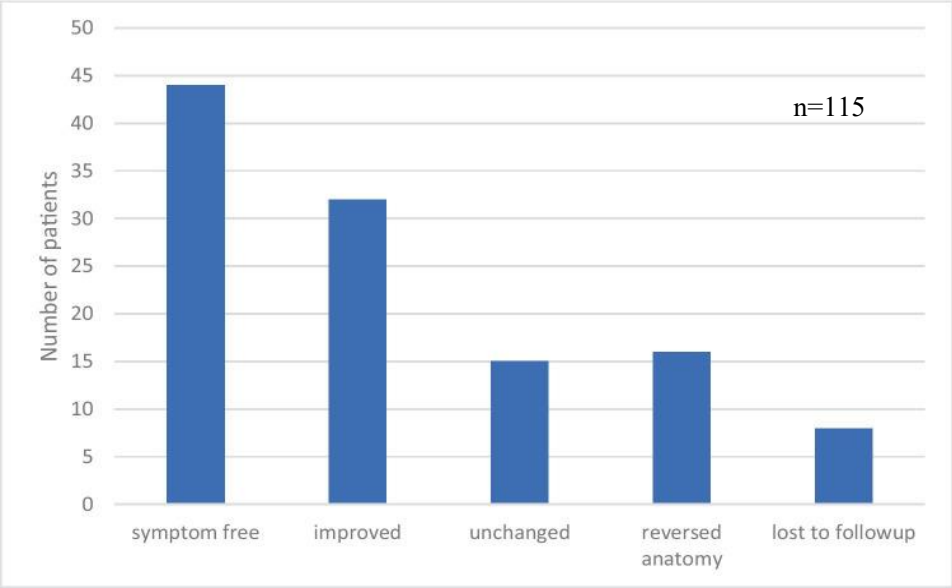


Fig. 1 Flowchart of the inclusion of patients with a prior Roux-en-Y gastric bypass (RYGB) who underwent revisional surgery due to suspected dysfunction of the jejunojejunostomy (JJ)

After surgical revision of the EA



Median time to follow-up 33 (12-75) months.

SURGERY FOR OBESITY AND RELATED DISEASES

ORIGINAL ARTICLE | ARTICLES IN PRESS

Surgical technique in constructing the jejunojejunostomy and the risk of small bowel obstruction after Roux-en-Y gastric bypass

Suzanne Hedberg, M.D. • Anders Thorell, M.D., Ph.D. • My Engström, R.N., Ph.D. • Erik Stenberg, M.D., Ph.D. • Torsten Olbers, M.D., Ph.D.

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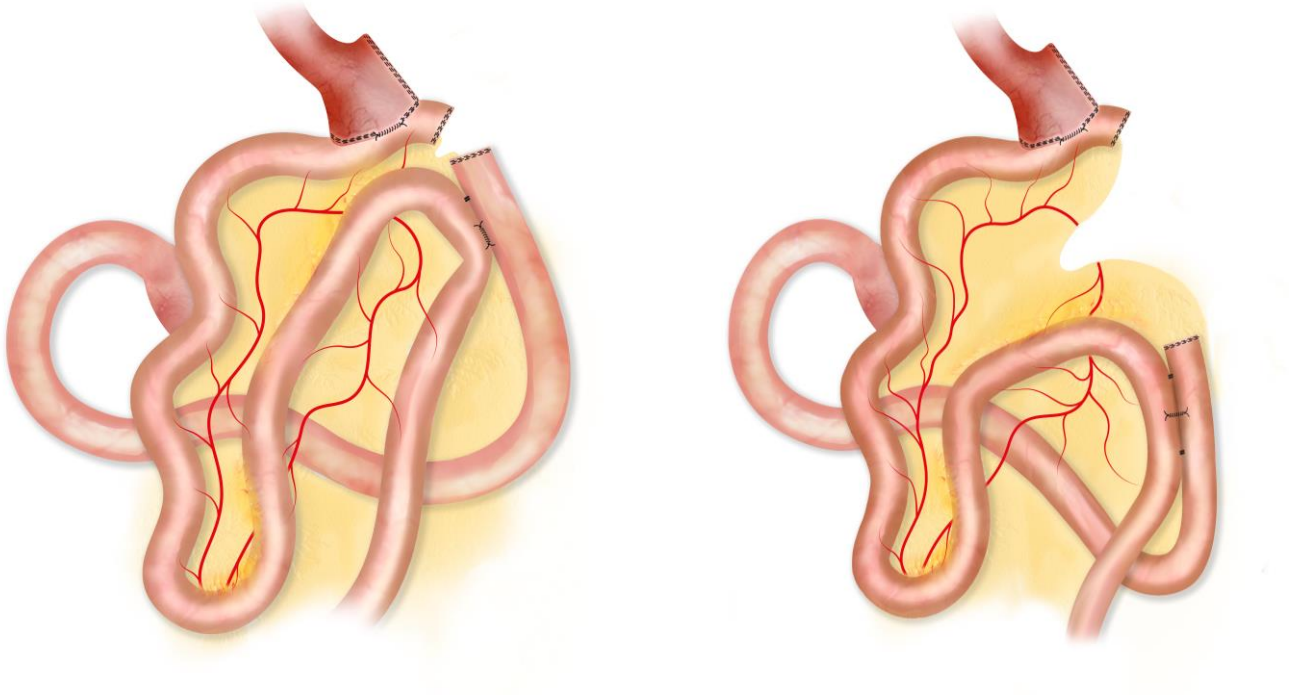

“Original” vs. most modified JJ:

- adjusted **OR** for SBO **0.24**, 95% CI 0.12–0.50, p<0.001)

Overall summary

- Surgical technique for constructing the JJ affects the risk of SBO

- Consider revision of the JJ in patients with post-prandial problems

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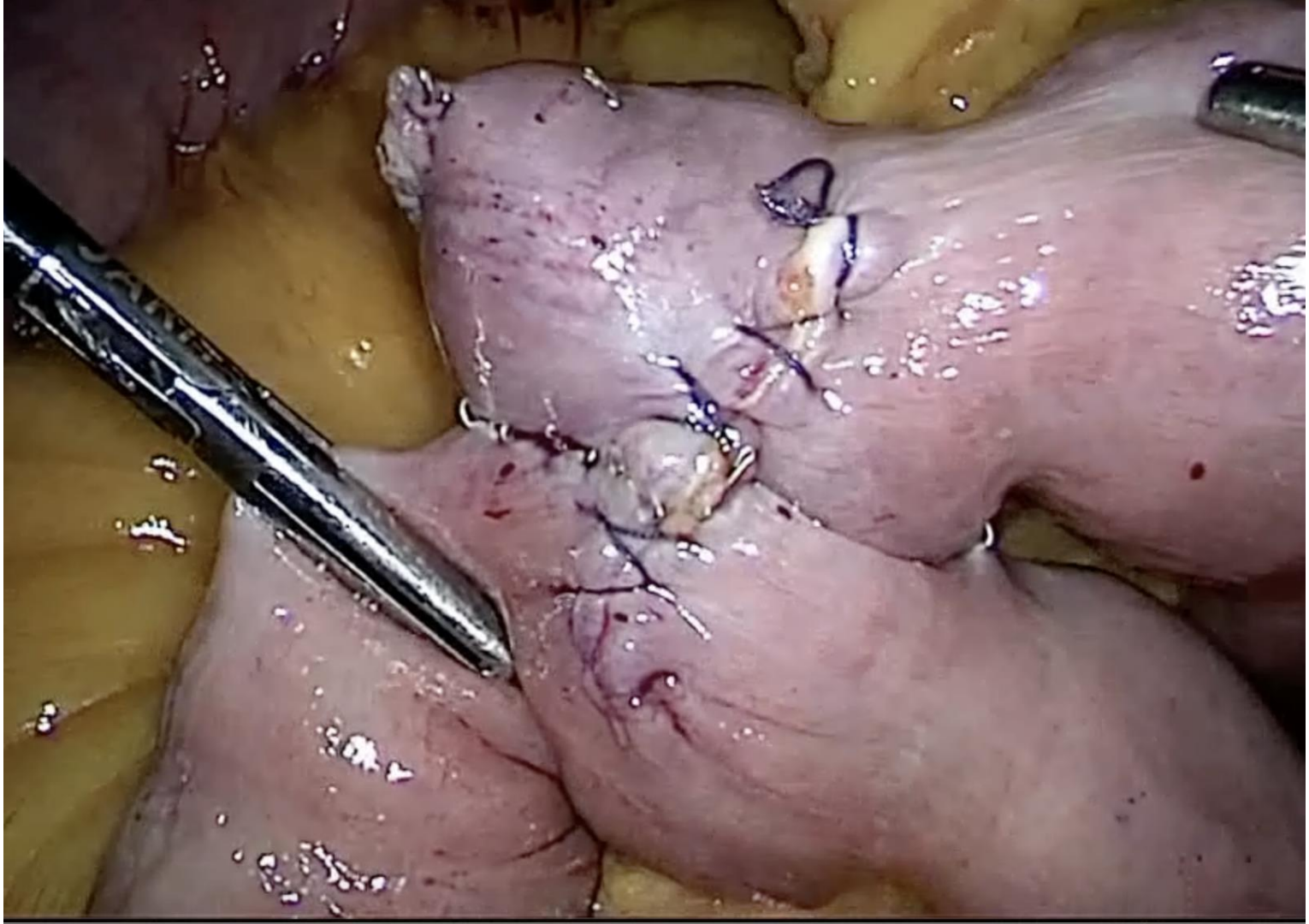

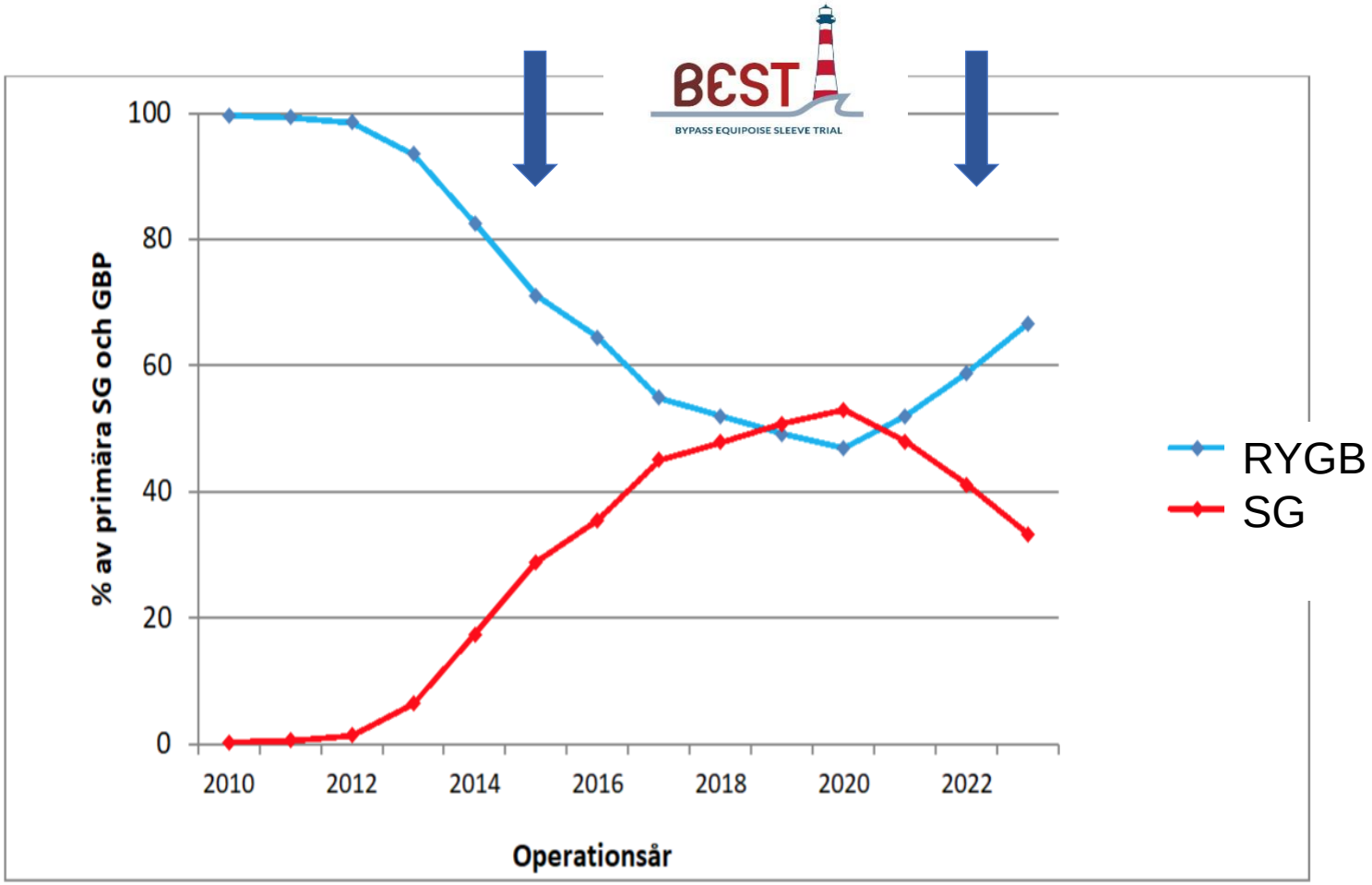
BEST
BYPASS EQUIPOISE SLEEVE TRIAL
100
80
60
40
20
0
% av primära SG och GBP
2010
2012
2014
2016
2018
2020
2022
Operationsår
RYGB
SG

Conclusions/ reflections..

- Chronic problems after RYGB need to be addressed in a multidisciplinary team
- If vomiting and postprandial problems- high likelihood a surgically correctable problem- often at the JJ
- Complex surgical problems can happen in patients with complex psychological problems..
- A small group should be considered for reversal to restore normal anatomy. Maybe not “tolerating” RYGB?
- The relation between severe hypoglycaemia and JJ dysfunction requires further investigation

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Region Östergötland

Thank you!