



吉林大学白求恩第三医院
THE THIRD BETHUNE HOSPITAL OF JILIN UNIVERSITY

Revisional surgery after SAID-S due to hypoproteinemia

Speaker: Jiang Tao

31th August 2023



仁心良术 · 大医情怀

2.9 3区 > Obes Surg. 2007 Dec;17(12):1614-8. doi: 10.1007/s11695-007-9287-8.

Epub 2007 Nov 27.

Proximal duodenal-ileal end-to-side bypass with sleeve gastrectomy: proposed technique

Andrés Sánchez-Pernaute¹, Miguel Angel Rubio Herrera, Elia Pérez-Aguirre,
Juan Carlos García Pérez, Lucio Cabrerizo, Luis Díez Valladares, Cristina Fernández, Pablo Talavera,
Antonio Torres

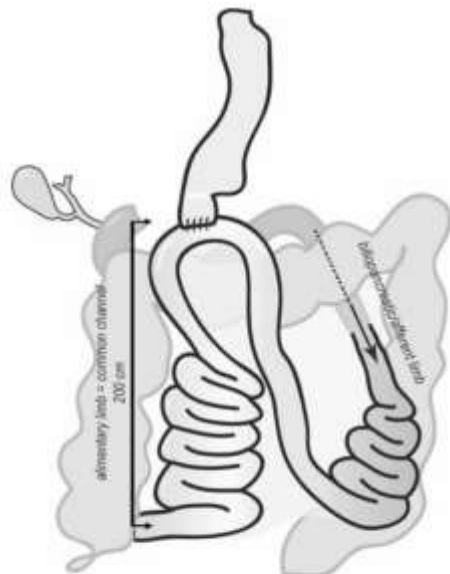


Fig. 1 The proposed technique consists on a sleeve gastrectomy followed by a loop duodeno-ileal anastomosis with a 200-cm efferent limb



3.479 3区 > Obes Surg 2018 May;28(5):1207-1216. doi: 10.1007/s11695-018-3201-4.

Single Anastomosis Duodenal-Ileal Bypass with Sleeve Gastrectomy/One Anastomosis Duodenal Switch (SADI-S/OADS) IFSO Position Statement

Wendy A Brown¹, Geraldine Ooi², Kelvin Higa², Jacques Himpens², Antonio Torres²;
IFSO-appointed task force reviewing the literature on SADI-S/OADS

Recommendation of the IFSO SADI-S/OADS Taskforce

Based on the existing data, we recommend the following:

1. SADI-S/OADS should be the standard identifier for this classification of modified DS.
2. There is insufficient data to comment on the long-term safety and efficacy of SADI-S/OADS and patients undergoing this procedure need to be aware of this, and counselled to stay in long-term multidisciplinary care.
3. Surgeons performing this, as well as any other bariatric/metabolic procedure, are encouraged to participate in a national or international registry so that data may be more effectively identified.
4. IFSO supports the SADI-S/OADS as a recognised bariatric/metabolic procedure, but highly encourages RCT's in the near future.



Prevalence of revision surgery due to malnutrition after SADI-S

1709 2区 > Surg Obes Relat Dis. 2020 Nov;16(11):1638-1646. doi: 10.1016/j.soard.2020.07.019.

Epub 2020 Jul 31.

Long-term outcomes of primary single-anastomosis

Nutritional outcomes with SADI-S at 5 years.

Nutrient	Baseline (n = 724)			Normal range	5 yr (n = 163)			P value (pre- versus post-abn.)
	Mean ± SD	Abn. n (%)	Total n (%)		Mean ± SD	Abn. n (%)	Total n (%)	
HbA1C	6.8 ± 4.8	307 (49.1)	624	4%-6%	5.2 ± .8	11 (10.5)	104	<.001
Glucose	118 ± 56	345 (51.2)	673	65-100 mg/dL	93.8 ± 33.4	26 (21.8)	119	<.001
Insulin	38.3 ± 70.6	311 (53)	586	2-23 mU/L	12.5 ± 32	3 (4.3)	69	<.001
Ca	9.2 ± .6	55 (8.2)	668	8.7-10.4 mg/dL	9.1 ± .4	18 (15.2)	118	<.05
PTH	57.2 ± 36.5	95 (32.4)	293	10-65 pg/mL	79.7 ± 86.3	30 (46.1)	65	.03
Albumin	4.2 ± 3.2	10 (1.7)	557	3.2-4.8 g/dL	4 ± .4	8 (6.9)	115	<.05
TP	7.2 ± .6	7 (1.2)	554	6-8.4 g/dL	6.7 ± .5	10 (8.6)	115	<.001
Cholesterol	179.2 ± 40	186 (28.4)	653	100-199 mg/dL	146 ± 43.6	8 (10.6)	75	<.05
TG	170.9 ± 126.9	295 (45.3)	651	40-150 mg/dL	97.4 ± 39.2	10 (13.3)	75	<.001
Ferritin*	137.5 ± 162.4	25 (4.1)	599	12-150/300 ng/mL	147.1 ± 157.1	11 (10)	109	<.05
Vit B12	585. ± 445.2	15 (2.5)	600	211-911 pg/mL	1122.1 ± 1060.9	0 (0)	106	.14
Vit B1	147.9 ± 75.6	36 (6.4)	555	66.5-200 nmol/L	153.1 ± 39.9	1 (9)	101	<.05
Vit A	34.1 ± 29.4	9 (3.2)	281	20-65 ug/dL	45.6 ± 23	3 (5.1)	58	.45
Vit D	26.9 ± 15.1	331 (53.7)	616	32-100 ng/mL	31.9 ± 13.4	30 (27.5)	109	<.001
Vit E	10.5 ± 4.1	7 (2.4)	281	5.5-18 mg/L	10 ± 3.4	2 (10.5)	19	<.05
Vit K1	.8 ± .6	3 (1.2)	249	.13-1.8 ng/mL	.4 ± .3	1 (5.8)	17	.12
Copper	-	0	0	72-166 ug/dL	116.7 ± 63.5	3 (2.8)	105	-
Zinc	-	0	0	56-134 ug/dL	79.6 ± 57.2	19 (18.4)	103	-

Results: Two patients (0.2%) required revision surgery due to malnutrition after SADI-S.



Strategy for hypoproteinemia after SADI-S

3479 3区 > Obes Surg. 2019 Aug;29(8):2387-2391. doi: 10.1007/s11695-019-03847-y.

Bowel Reconstruction to Treat Chronic Diarrhea and Hypoproteinemia Following Single Anastomosis Duodenal-Ileal Bypass with Sleeve Gastrectomy: a Single-Site Experience

Table 1 Outcomes with bowel reconstruction

Patient (no.)	Preoperative CCL/CCS			Postoperative CCL/CCS		
	Indication	Detail	Common channel length (cm)	Common channel length (cm)	Short-/long-term complication	Outcome
1	Diarrhea	6-8 loose stools a day	330	530	None	NBM
2	Diarrhea	10 loose stools a day	350	550	None	NBM
3	Diarrhea	6 loose stools a day	160	450	Small-bowel enterotomy	NBM
4	Diarrhea	9-10 loose stools a day	400	550	None	NBM
5	Diarrhea	4-5 loose stools a day	300	550	None	NBM
6	Diarrhea	8 loose stools a day	400	600	None	NBM
7	Diarrhea	6-8 loose stools a day	300	450	None	NBM
8	Hypoproteinemia	5.6 g/dL	400	870	None	Protein levels improved but below normal (6.0 g/dL)
9	Hypoproteinemia	5.1 g/dL	185	385	Kwashiorkor	Protein levels improved but below normal (5.5 g/dL)

Currently, the treatment strategy for hypoproteinemia after SADI-S is mainly to **lengthen the common channel (CCL)**.

EBWL excess body weight loss, BMR body mass index reduction, NBM (normal bowel movement) = 2-3 bowel movement/day

SADI-S in our center



First laparoscopic SADI-S—On October 19, 2018.

First Da vinci robotic SADI-S—On March 9, 2020.

To date, we have finished **160** SADI-S, including **22** laparoscopic SADI-S and **138** robotic SADI-S.

Preoperative variables



吉林大学白求恩第三医院
THE THIRD BETHUNE HOSPITAL OF JILIN UNIVERSITY

Revisional surgery after SAID-S (1/160)

—— dystrophic liver disease

Age: 18-year old

Body weight: 155 kg

BMI: 50 kg/m²

Blood pressure: 144/94 mmHg

Date of SADI-S: August 25, 2020.



Main clinical manifestations of dystrophic liver disease:

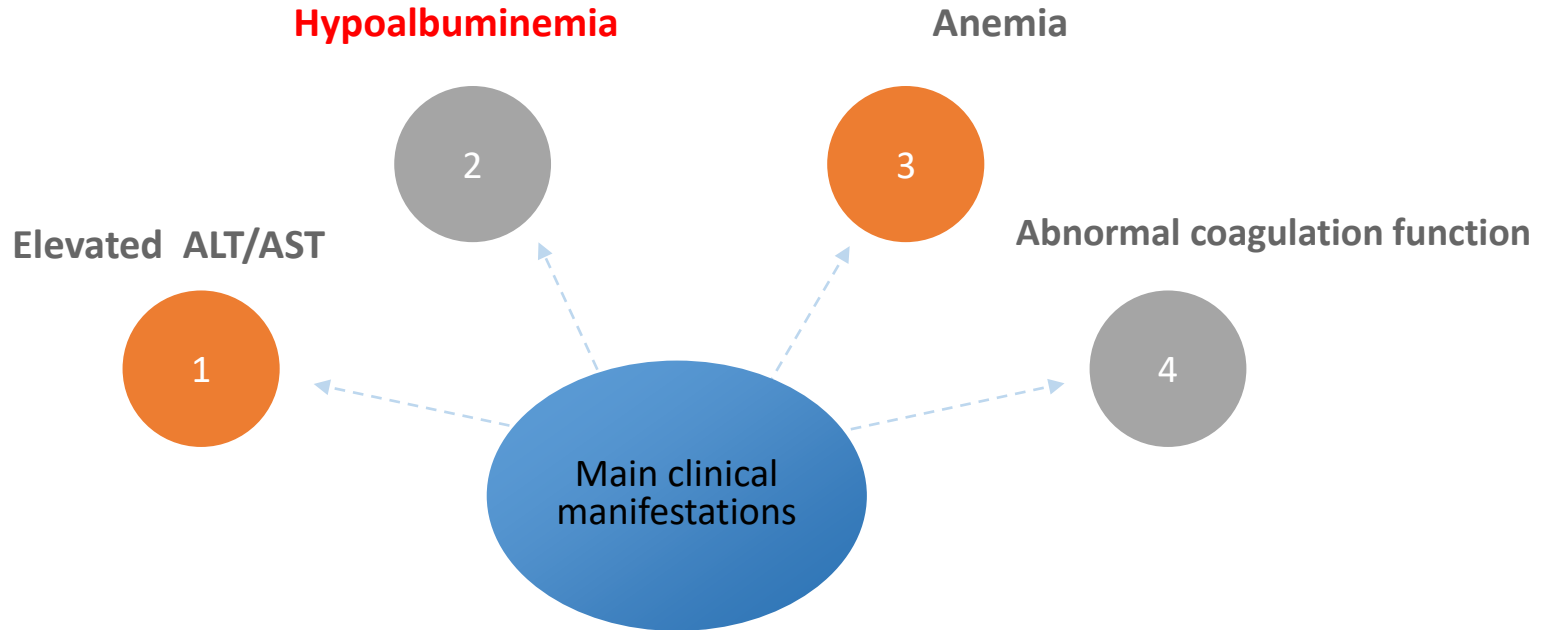
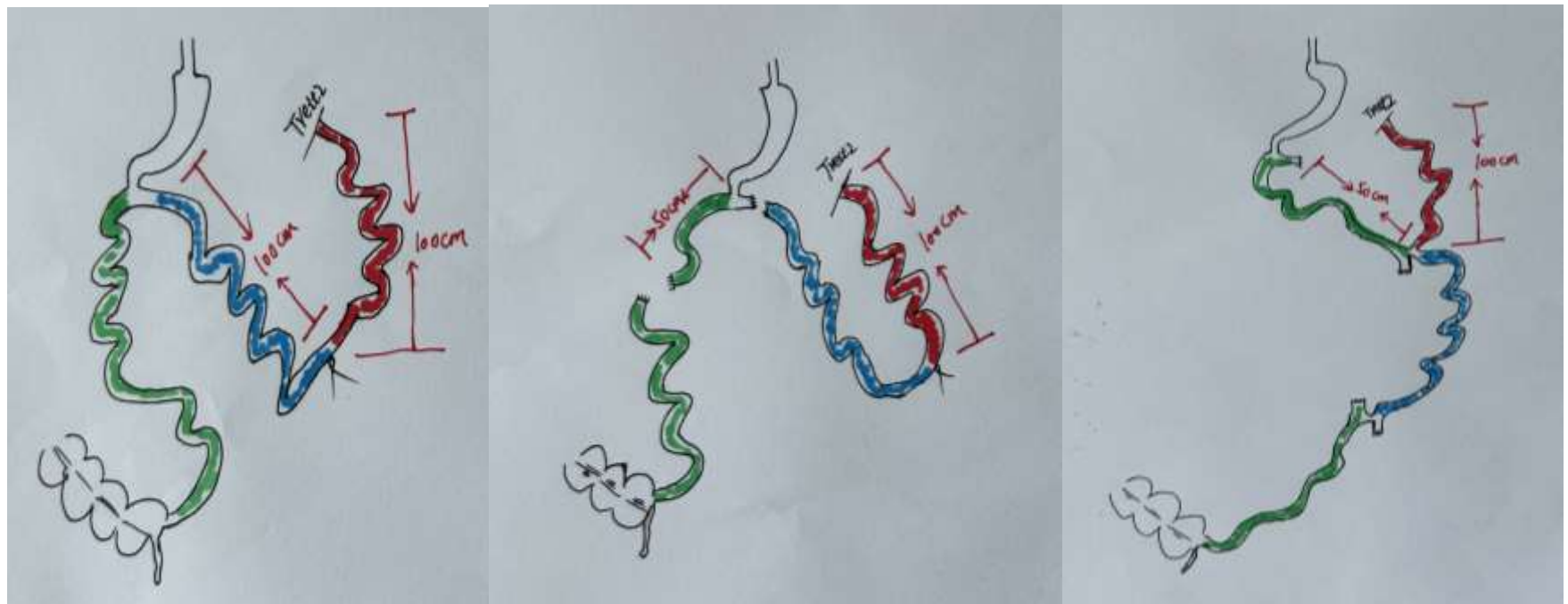


Diagram of revision surgery





吉林大学白求恩第三医院
THE THIRD BETHUNE HOSPITAL OF JILIN UNIVERSITY

Revisional surgery after SAID-S due to hypoproteinemia

Tao Jiang



仁心良本 · 大医情怀

- **The proportion of revision surgery due to malnutrition after SADI-S is low.**
- **Malnutrition after SADI-S can be improved by prolonging the common channel.**



吉林大学白求恩第三医院
THE THIRD BETHUNE HOSPITAL OF JILIN UNIVERSITY

THANKS FOR WATCHING



仁心良术 · 大医情怀