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Friday, June 9, 2017

(Room 5)

14:00 - 14:55 WS #45: What You Need to Know re Bariatric Surgery

15:05 - 16:00 WS #57: What You Need to Know re Bariatric Surgery
(Repeated)

What you need to know Re: Bariatric Surgery

Jon Morrow
Grant Beban

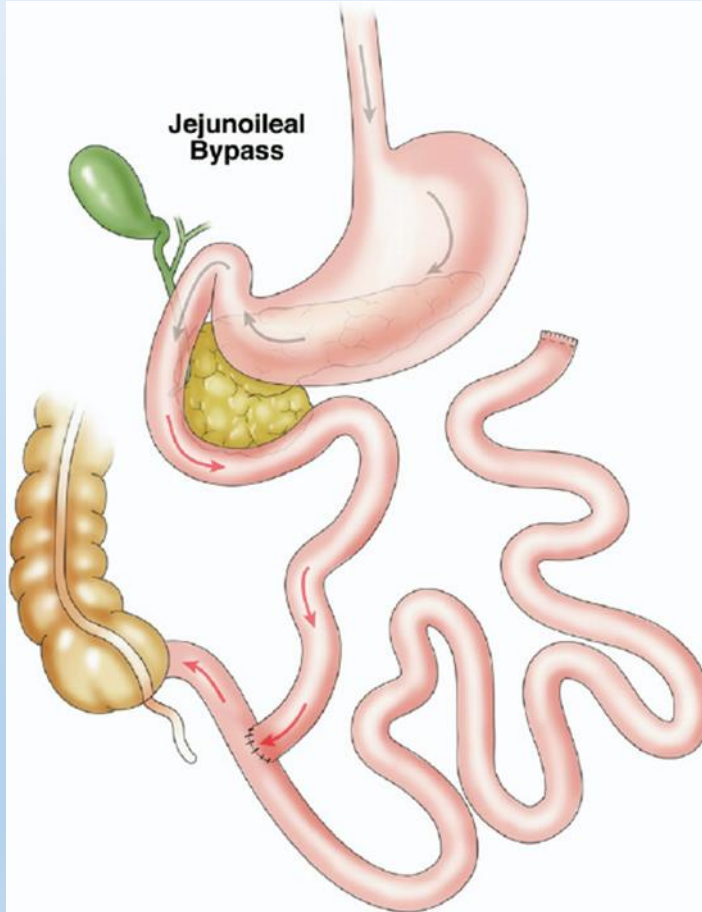
Overview

- History
- Current Procedures
- Who to refer
- Prioritisation Tool
- Process
- Complications
- Q & A

History of Bariatric Surgery

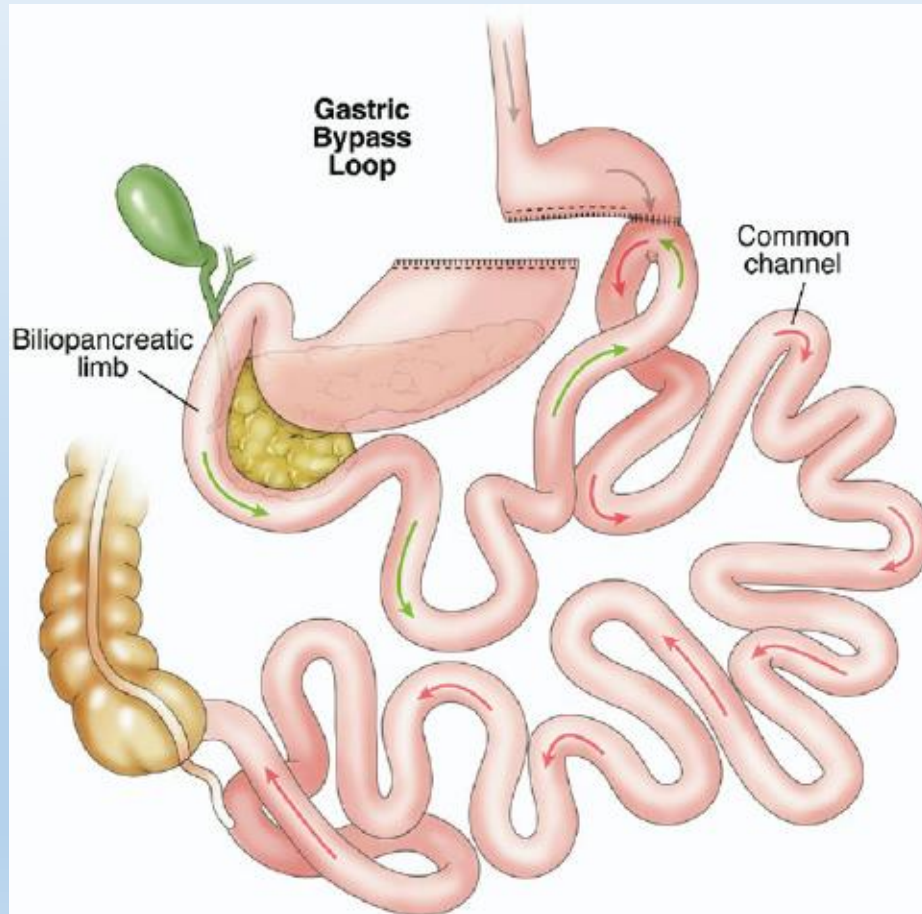
- 1920's Diets were not successful in maintaining weight loss
Noted that short gut could lead to weight loss
- 1952 Dr Viktor Henrickson (Swedish Surgeon) –
 - resected 105cm of small bowel from 32 yr old obese woman
 - Small amount weight loss but improvement in quality of life

1950 – Jejunioileal Bypass

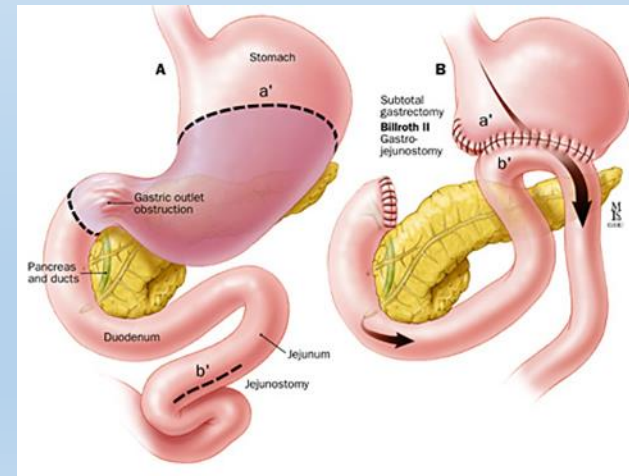


- Dr Varco
- Malabsorptive
- Bypass enteritis, malabsorption of vitamins/minerals, arthritis, renal calculi, cholelithiasis, osteomalacia, pseudo-obstruction

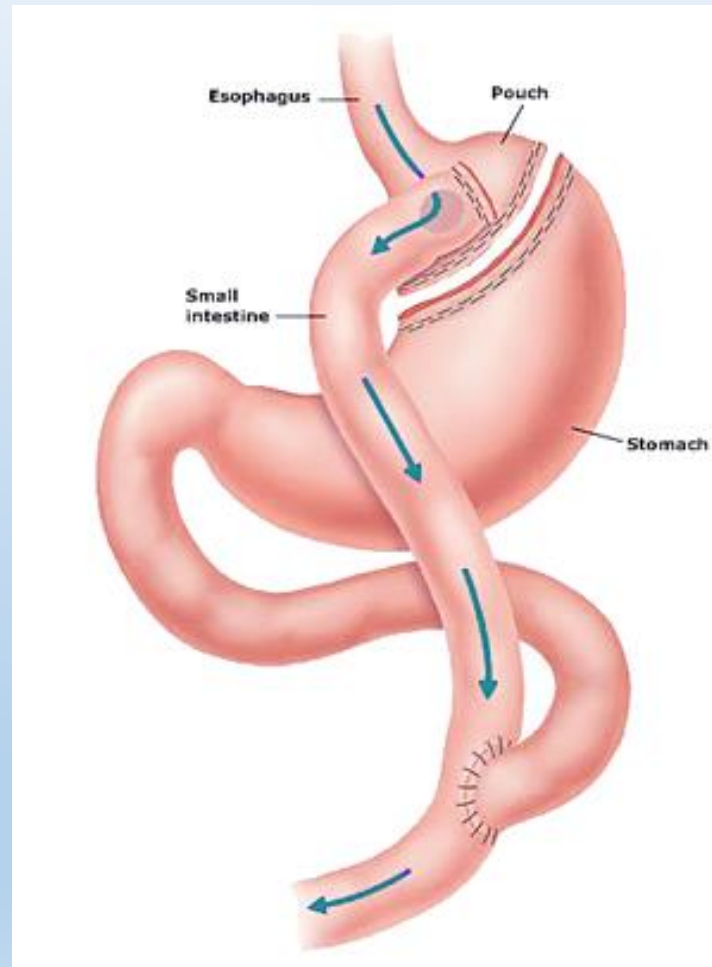
1967 – Open Gastric Bypass (loop)



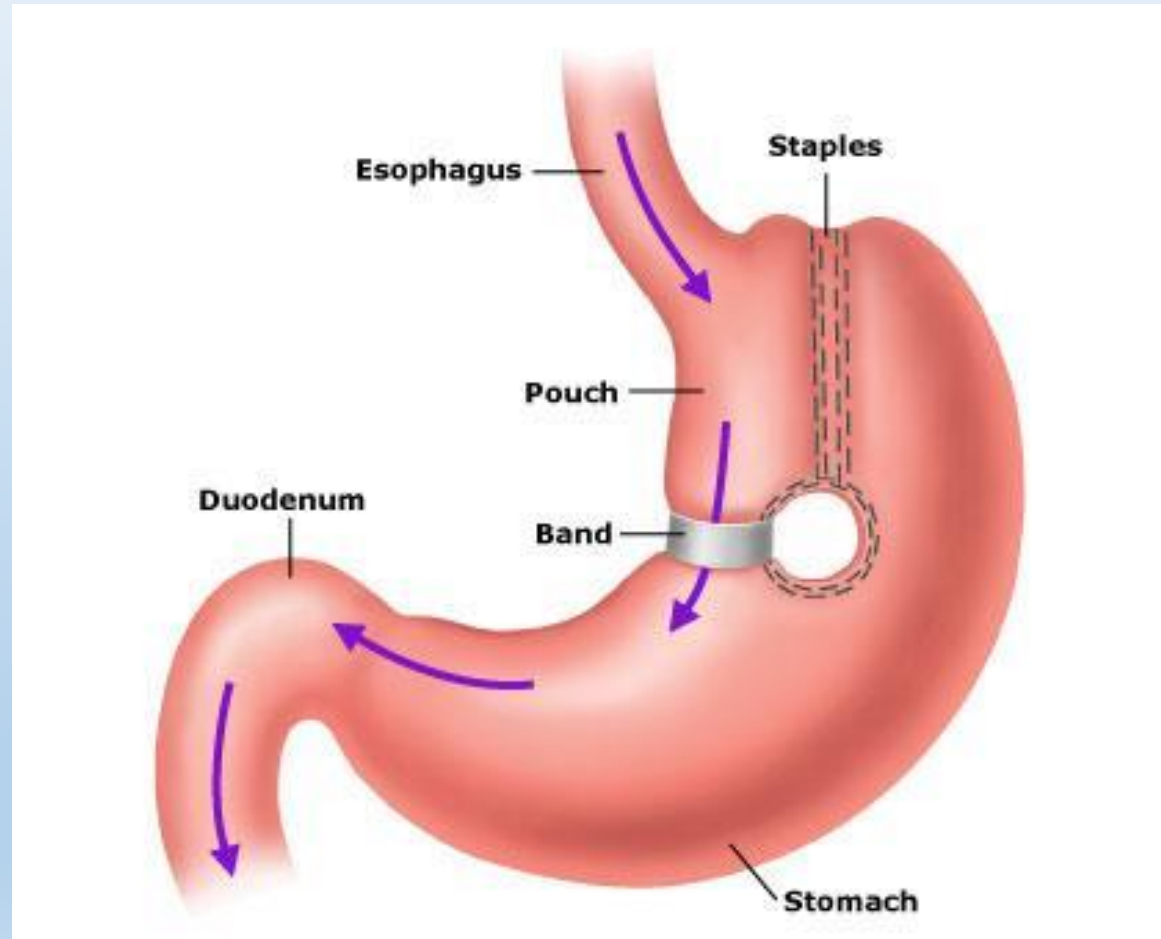
- Dr Mason
- Restrictive>malabsorptive
- Observation of Billroth 2 gastrectomy



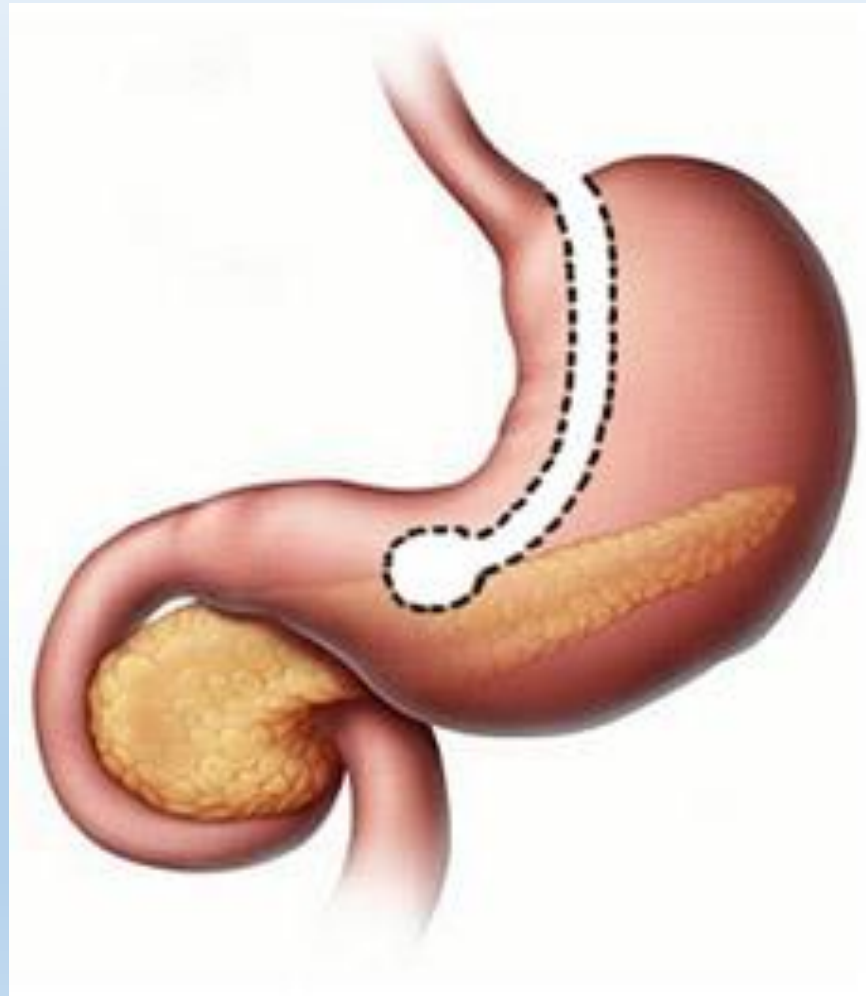
1970s - Roux en Y Gastric Bypass



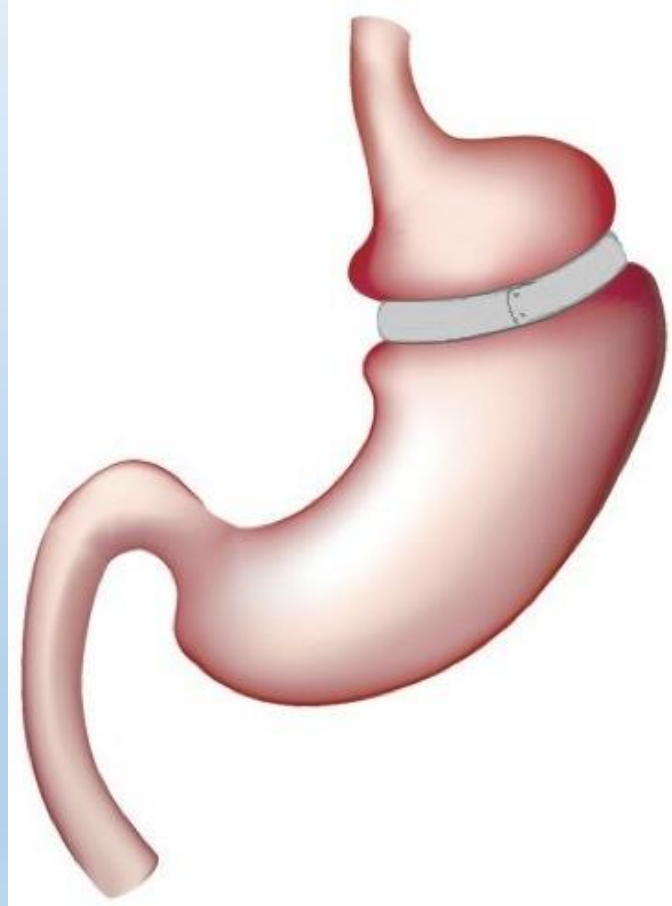
1970's – Vertical Banded Gastroplasty



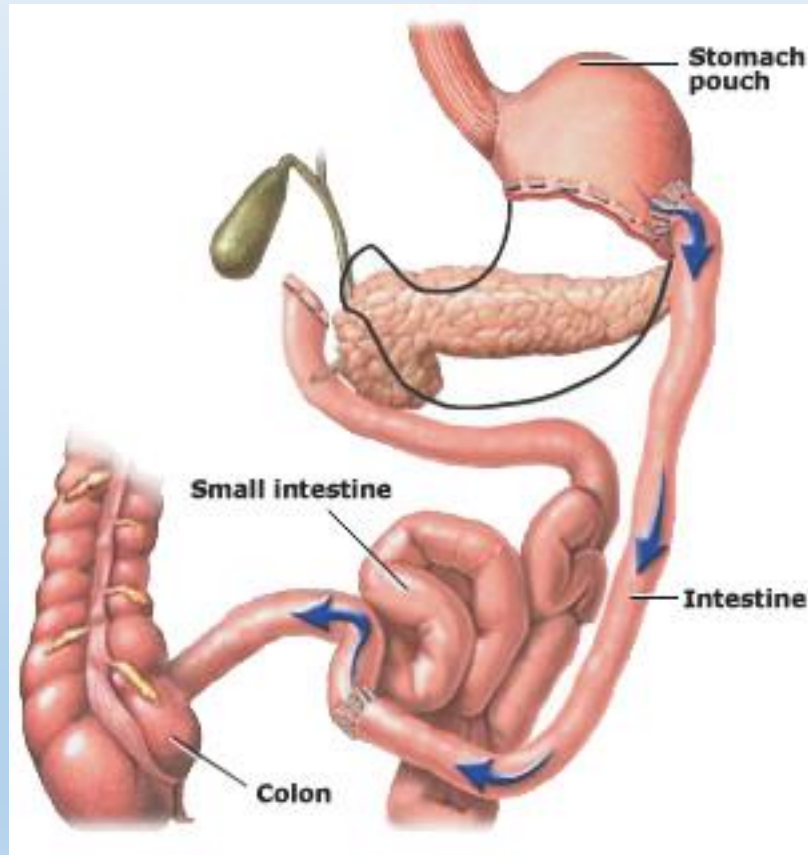
1977 - Magenstrasse and Mills



1970-80 – Non-adjustable Gastric Band

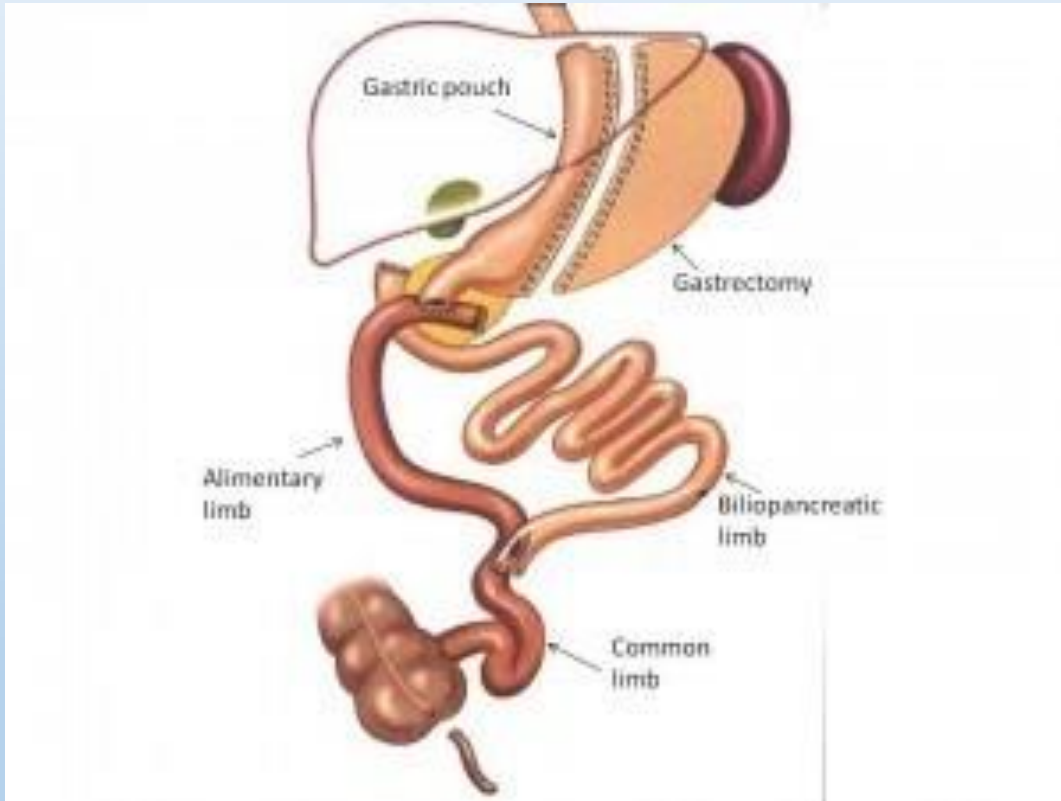


1979 – Bilio-Pancreatic Diversion (BPD)



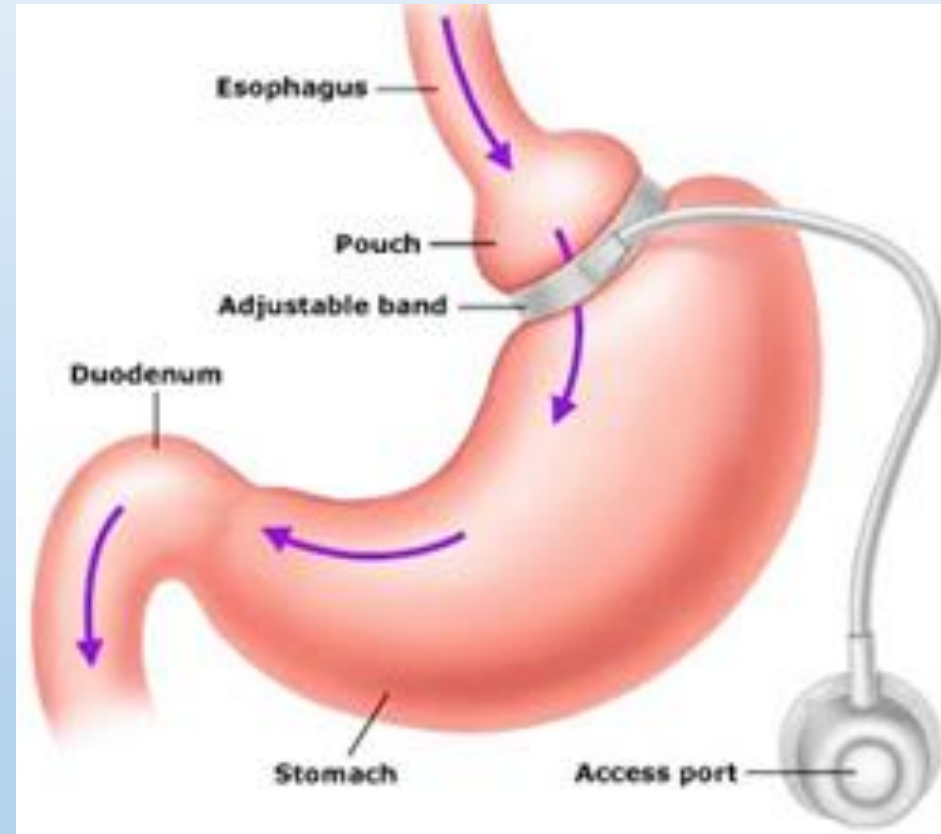
- Dr Scopinaro
- Malabsorptive
- CC 50cm
- Diarrhoea, steatorrhoea, flatulence, anaemia from poor iron absorption, stomal ulceration, dumping syndrome, peripheral neuropathy, Wernickes encephalopathy, bone demineralisation, protein malnutrition

1998 - BPD DS

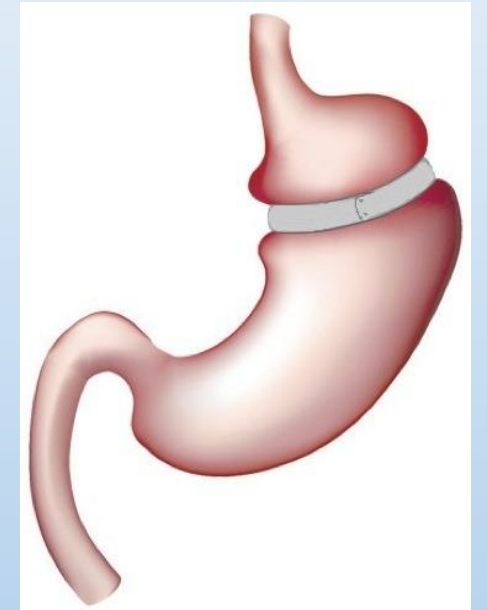
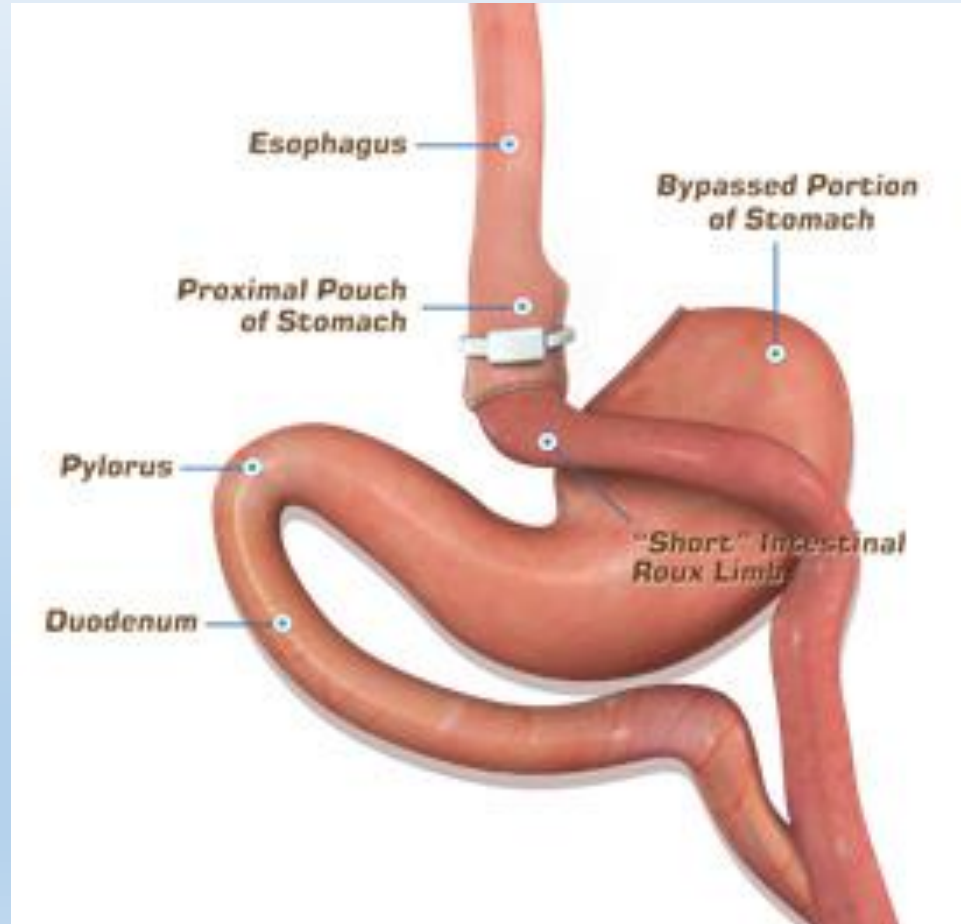
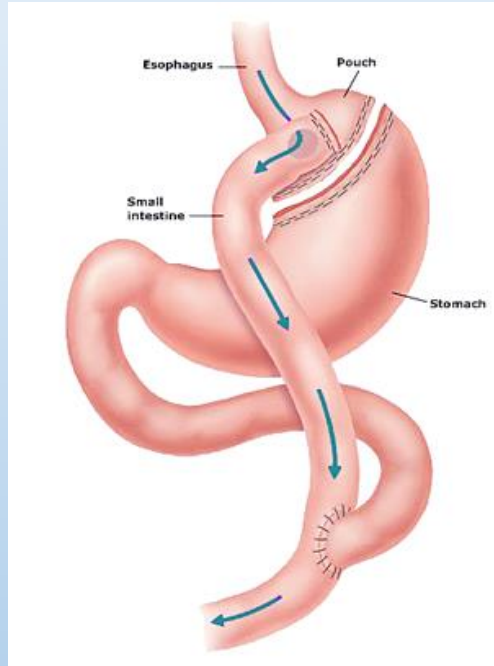


- Hess and Hess
- Malabsorptive
- CC 100cm
- Pylorus preserving
- Less dumping/marginal ulceration/liver and renal failure

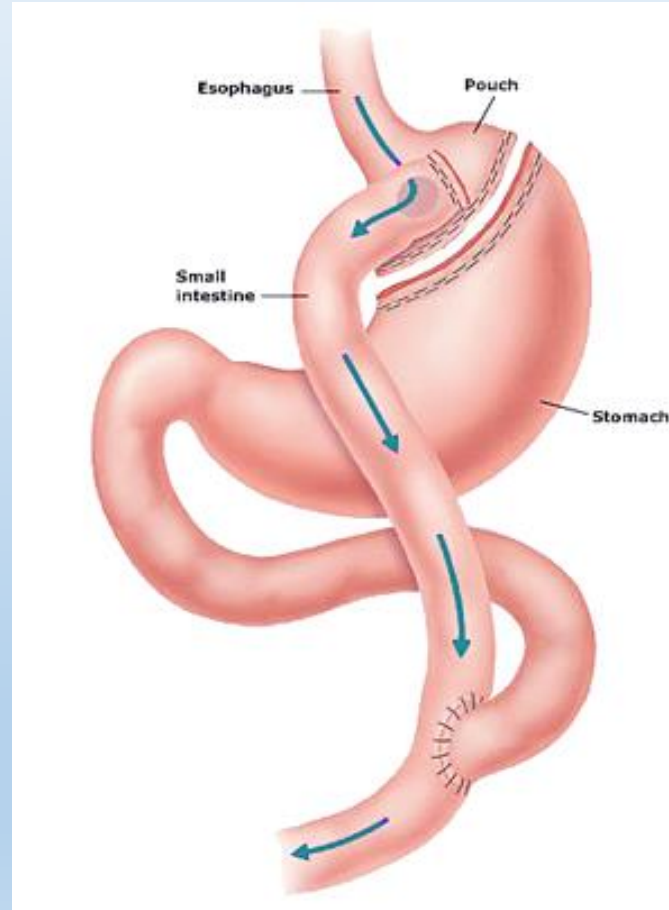
1986 – Adjustable Gastric Band



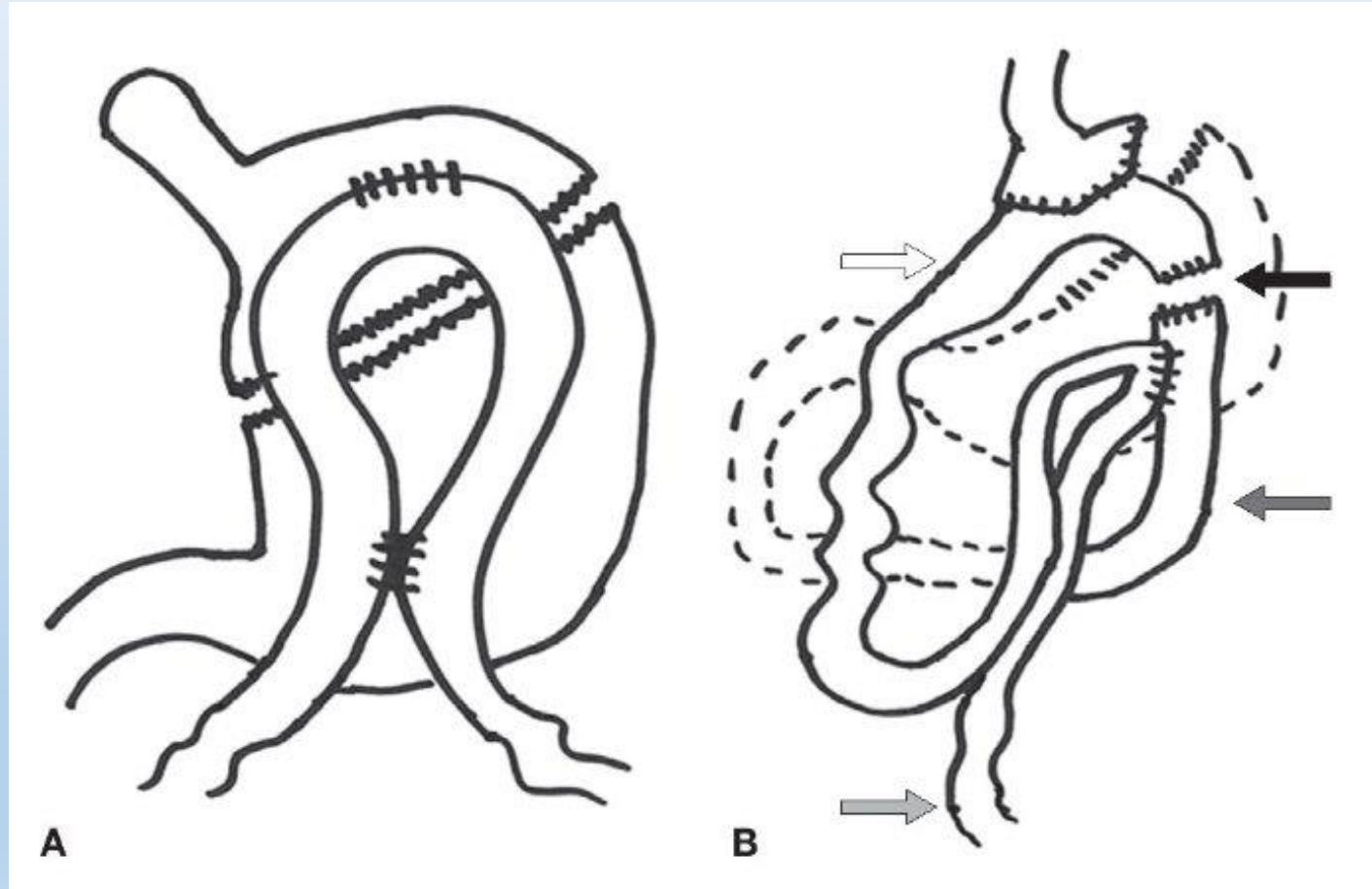
1989 – Banded Gastric Bypass



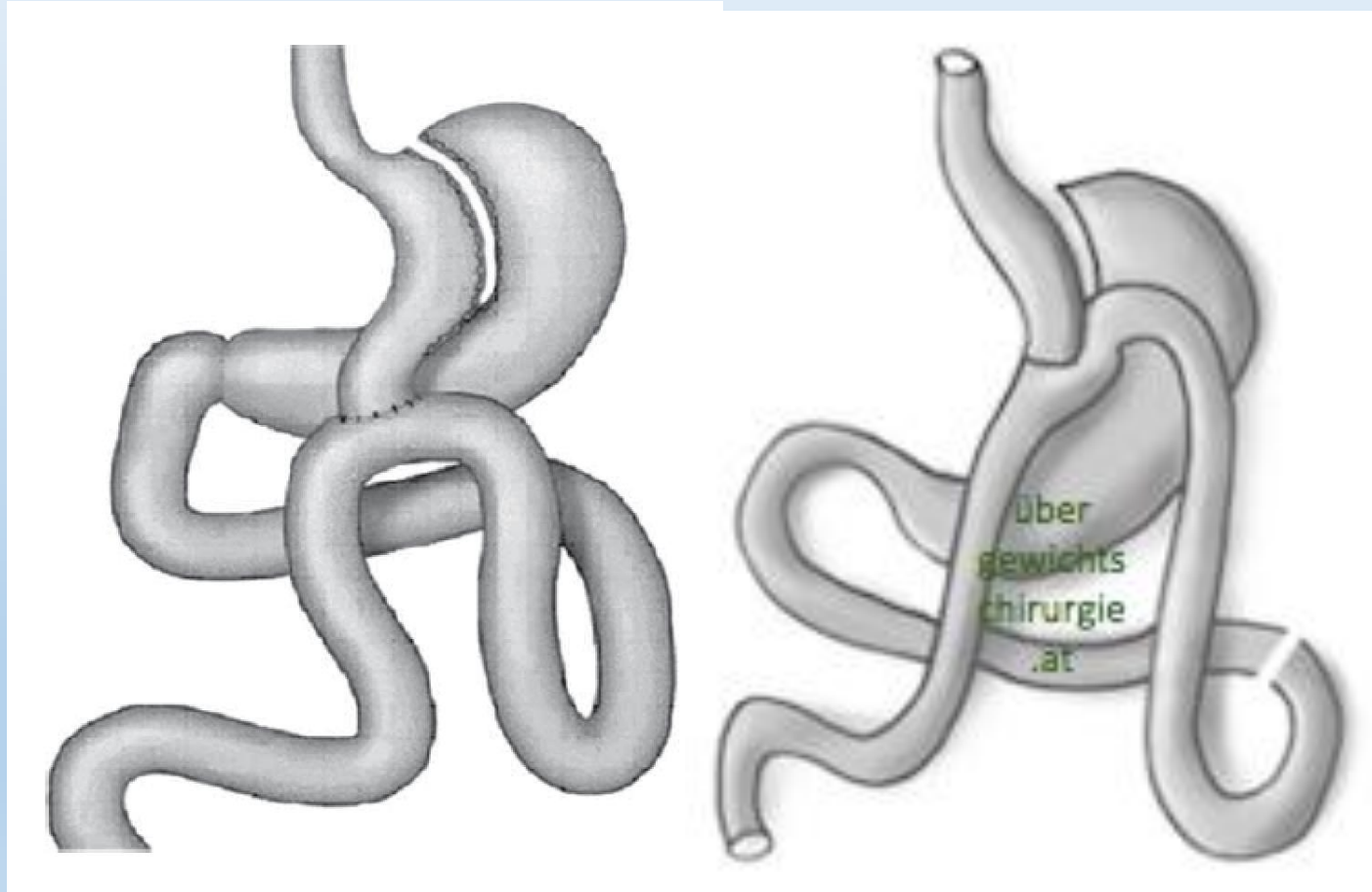
1994 – Lap Roux en Y Gastric Bypass



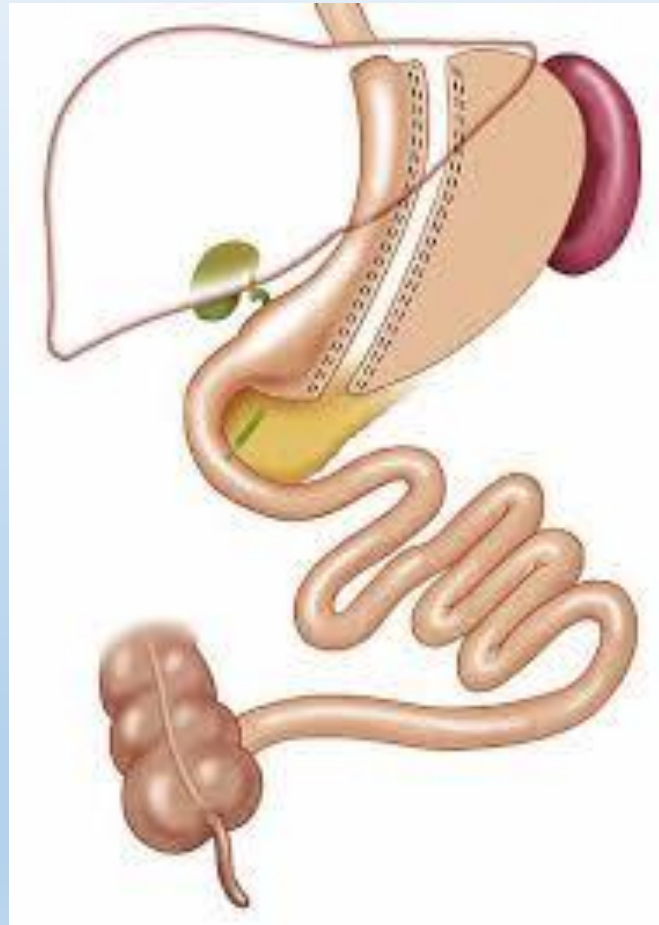
1996 – Omega Loop Gastric Bypass



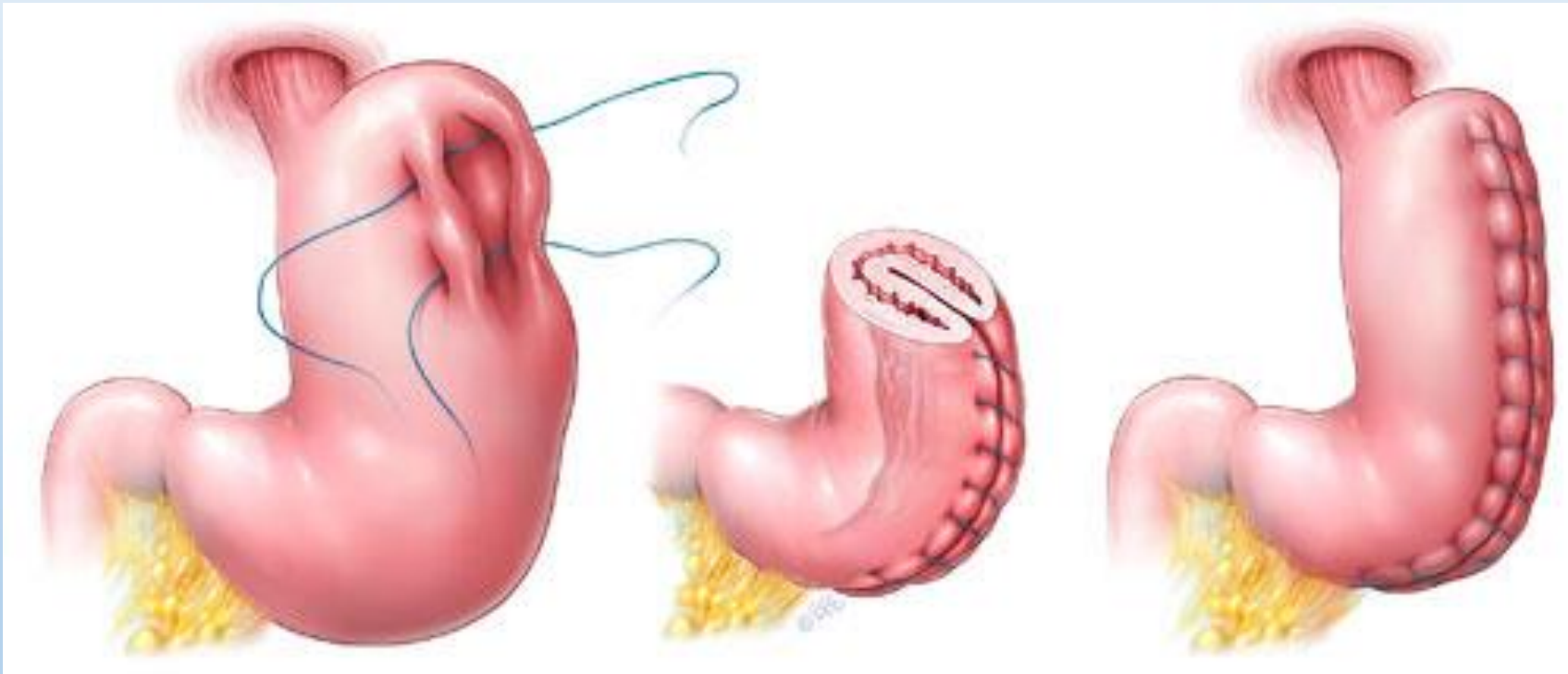
1997 - Mini Gastric Bypass



1990's - Sleeve Gastrectomy



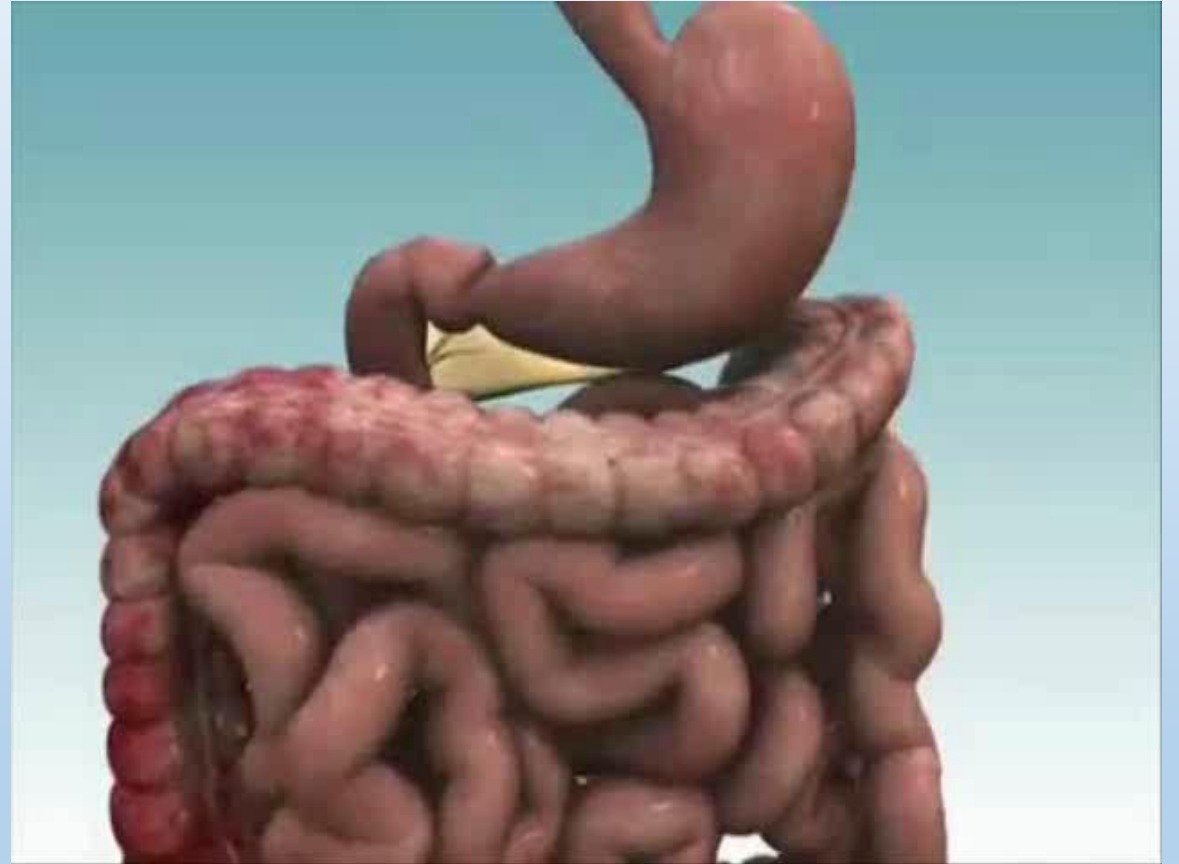
2000's - Plication Gastrectomy



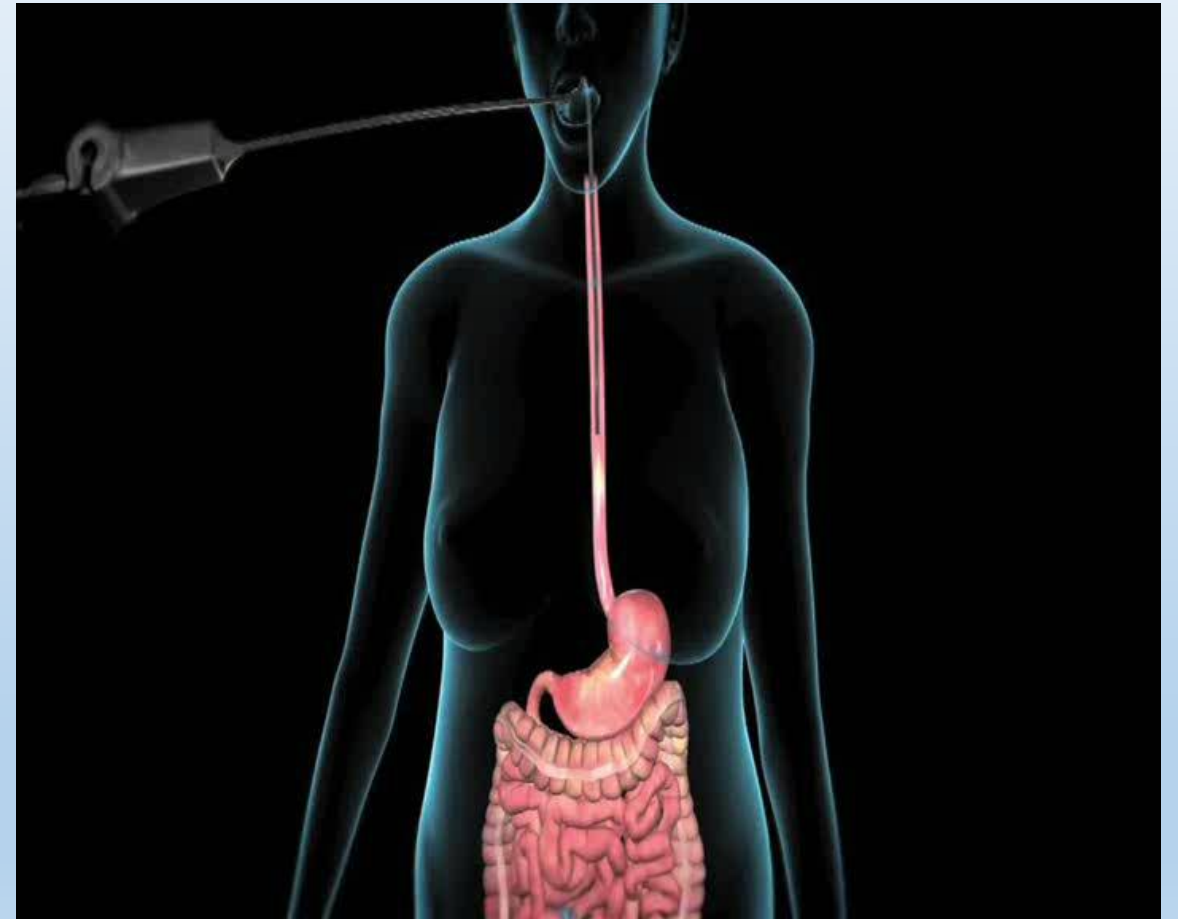
Intragastric Balloon



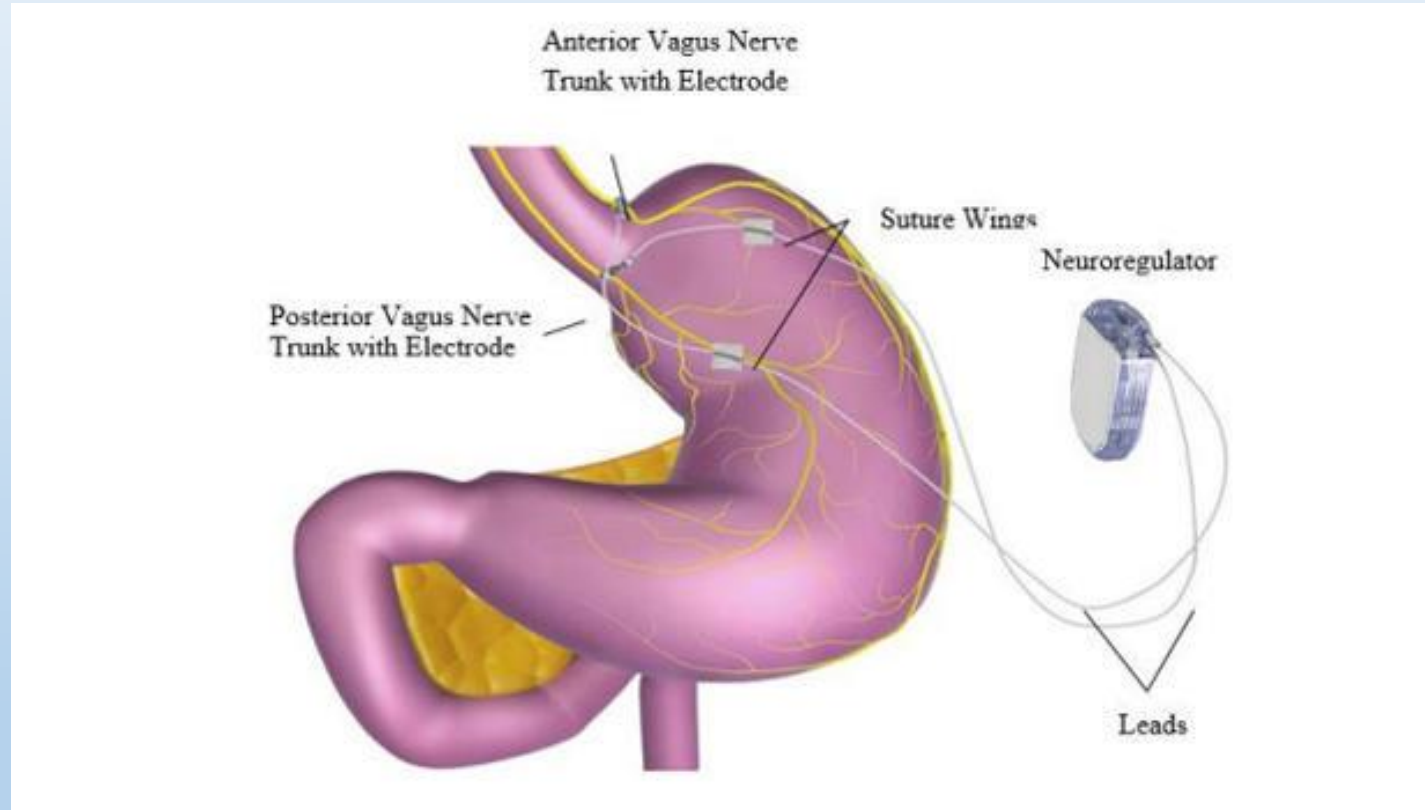
Endobarrier



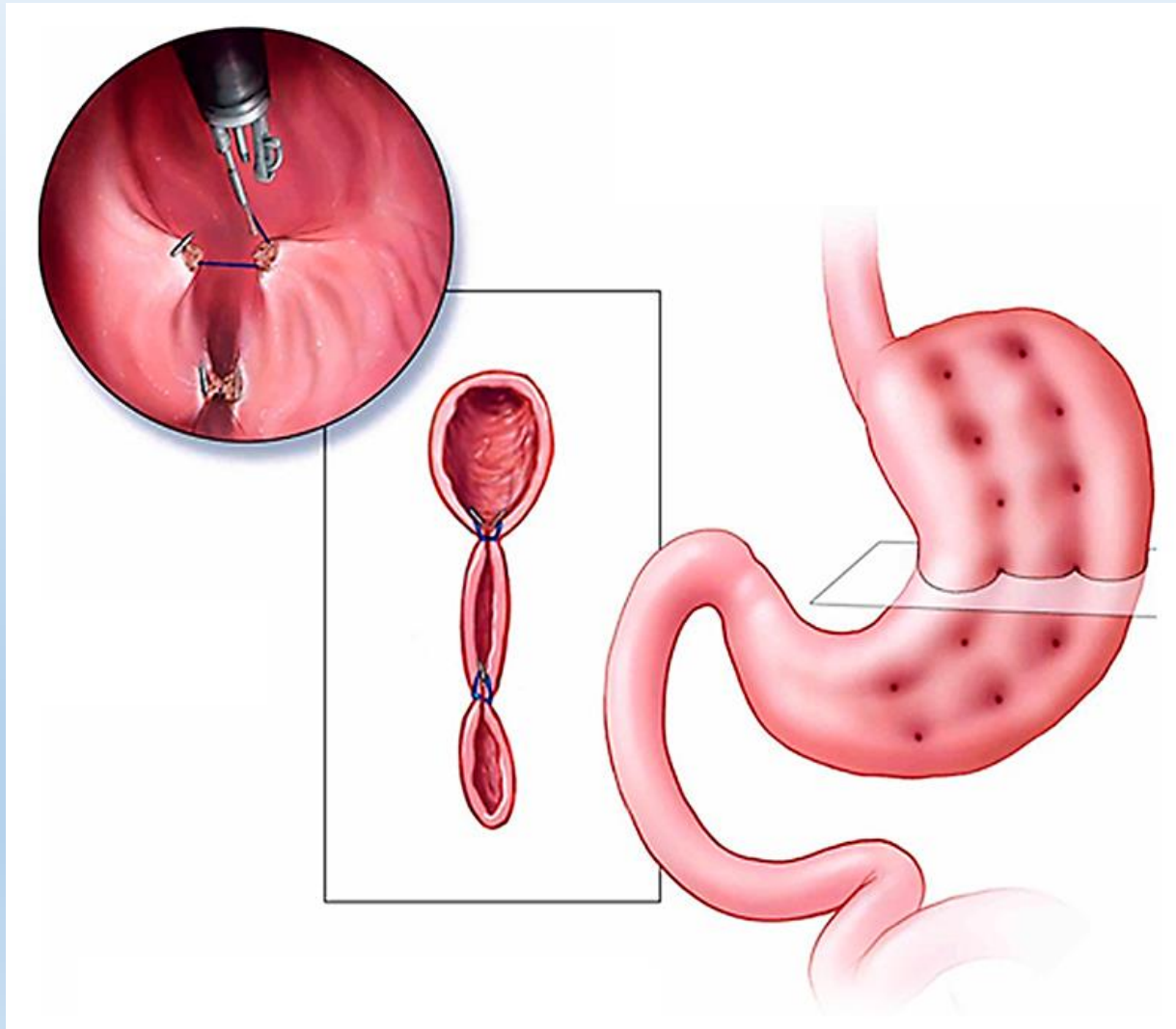
AspireAssist



Vagal Nerve Blocking Therapy



Endoscopic Sleeve Gastroplasty



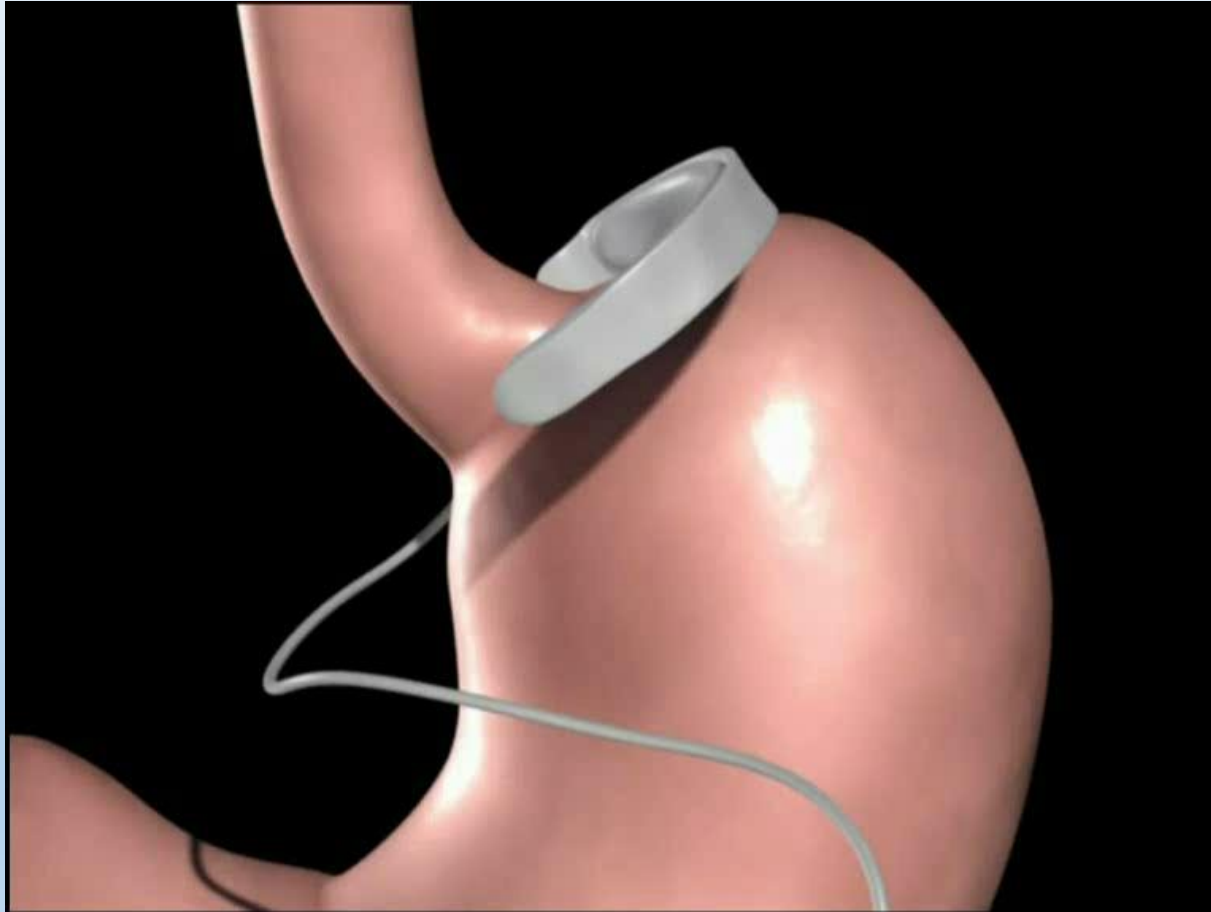
Confused??

- Which Procedure?
- Decision based on:
 - Procedure
 - Primary
 - Revisional
 - Surgeon factors
 - expertise
 - Patient factors
 - Patient wishes
 - Co-morbidities
 - ASA score
 - Previous surgery
 - Public or Private

Current Bariatric Procedures

- Surgical Procedures
 - Restrictive
 - Adjustable Gastric Band
 - Gastric Sleeve
 - Gastric Bypass – RnY, SAGB
 - Malabsorptive
 - BPD/DS
- Endoscopic procedures
 - Gastric balloon

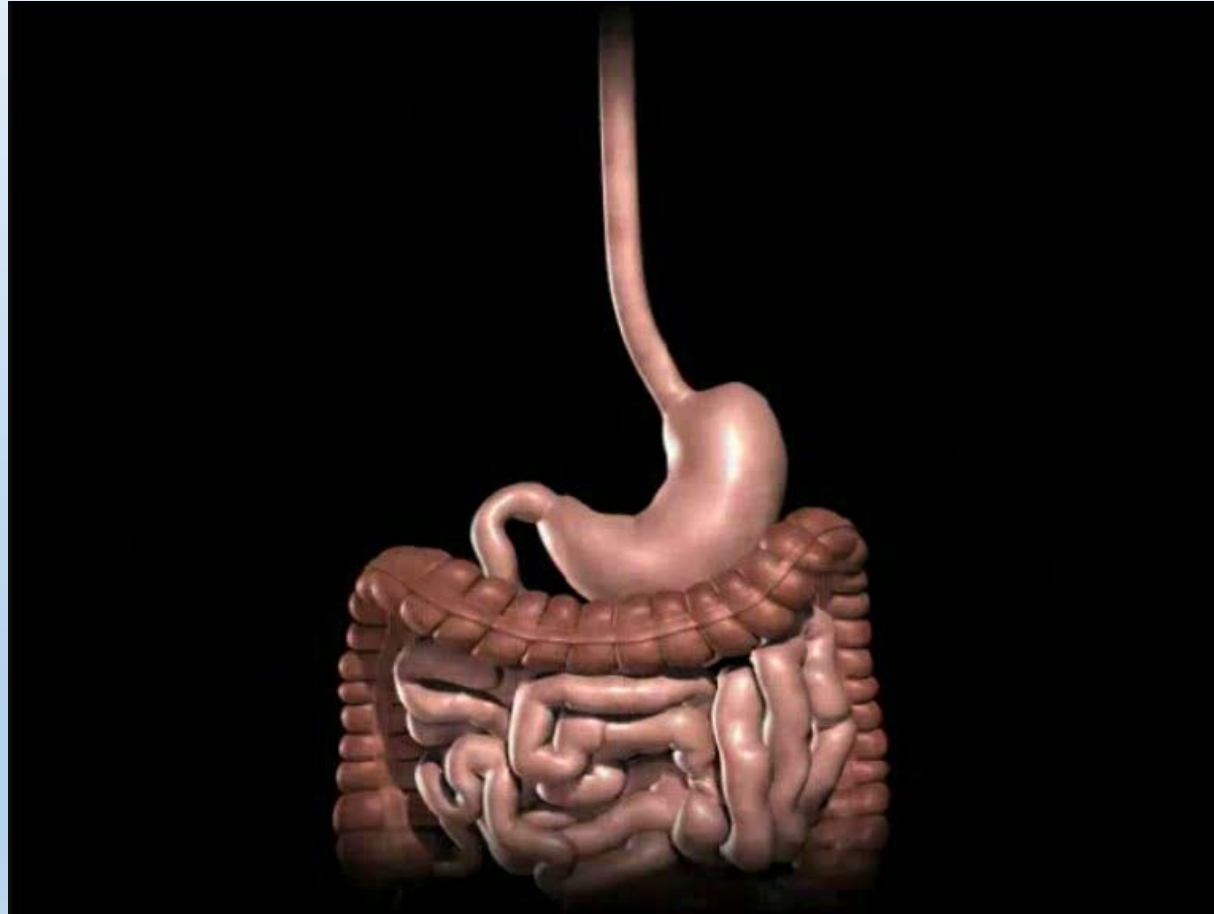
Adjustable Gastric Band



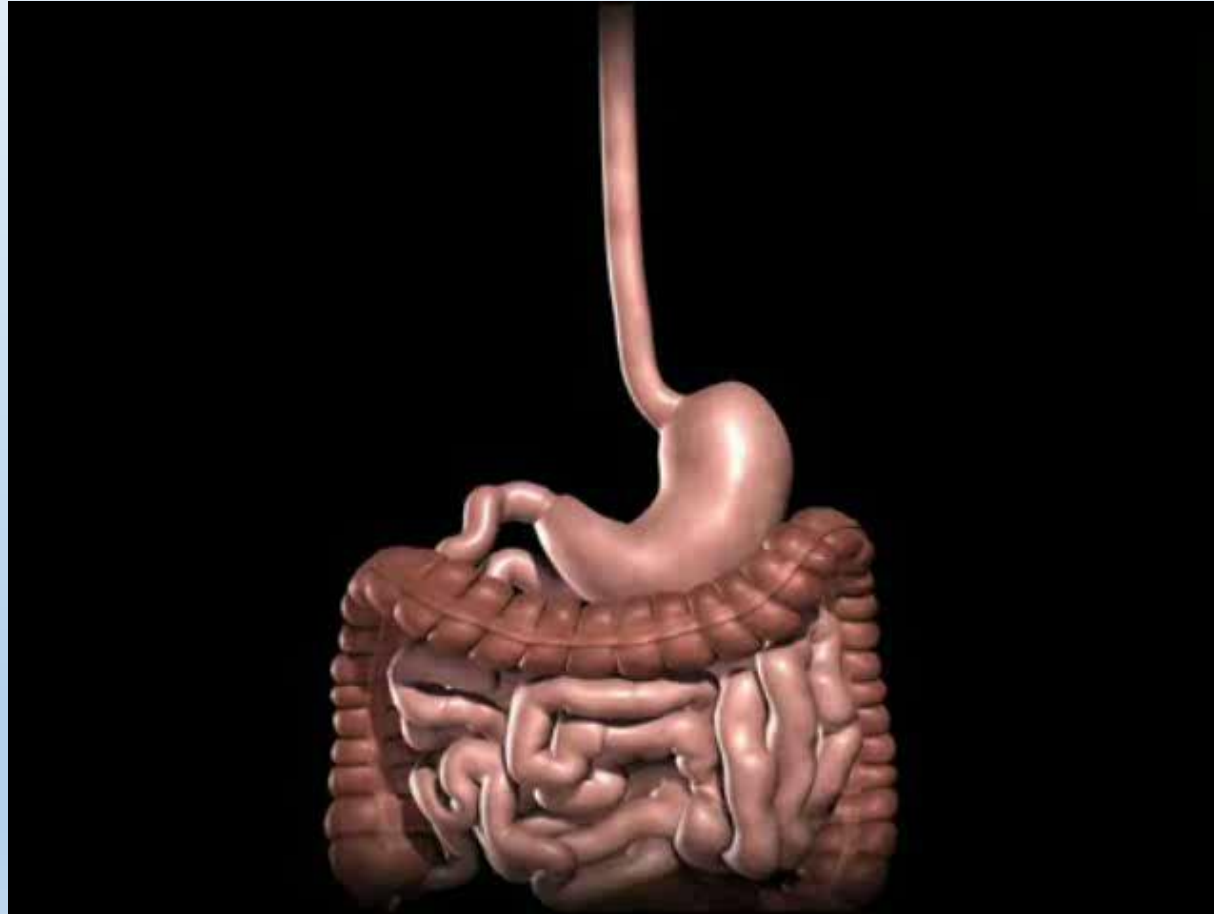
Gastric Sleeve



Gastric Bypass



BPD/DS



VBG



Who to refer

- BMI>40
- BMI>30 with comorbidities
 - Diabetes
 - Hypertension
 - OSA
- Must be motivated to change lifestyle
 - Dietary changes
 - Increase physical activity
 - Non smoker

Contraindications

- Severe cognitive or mental disorders
- Severe and non-stabilised eating disorders
- Alcohol or psychoactive substance abuse
- Diseases life-threatening in short or medium term
- Contraindications to general anaesthesia
- Absence of identified prior medical management of obesity
- Inability to participate in lifelong medical follow-up

Access to Bariatric Surgery

- Public Sector

- Equitable
- Transparent
- Consistent
- Based on resources per DHB

- Prioritisation tool

- Private Sector

Prioritisation Tool

- 4 major criteria
 - Impact on Life
 - Likelihood of achieving maximum benefit with respect to diabetes
 - Duration of benefit
 - Surgical Risk
- 3 points along pathway tool can be used:
 - Determination of access to FSA
 - At FSA to determine surgical access
 - After period of “compliance assessment” to re-establish treatment order

Impact on life

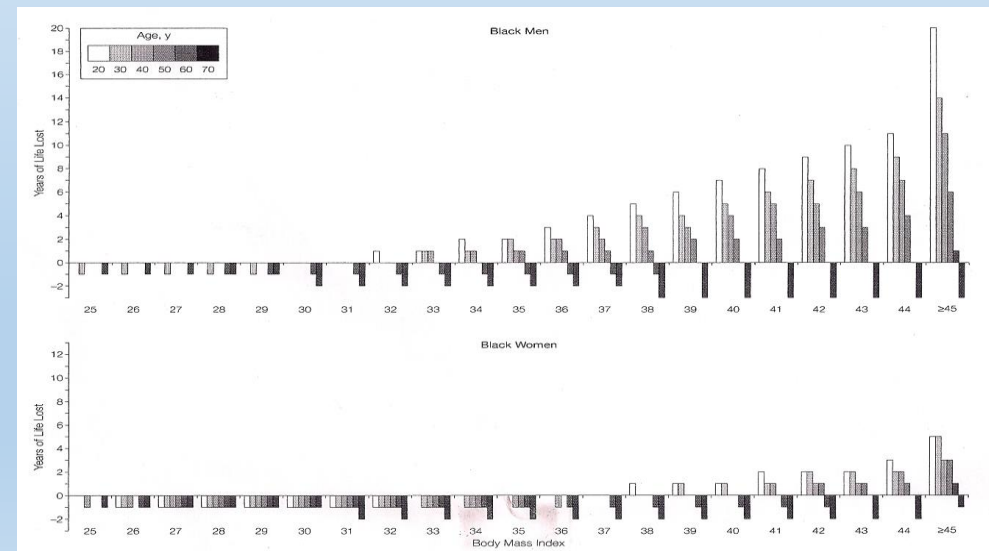
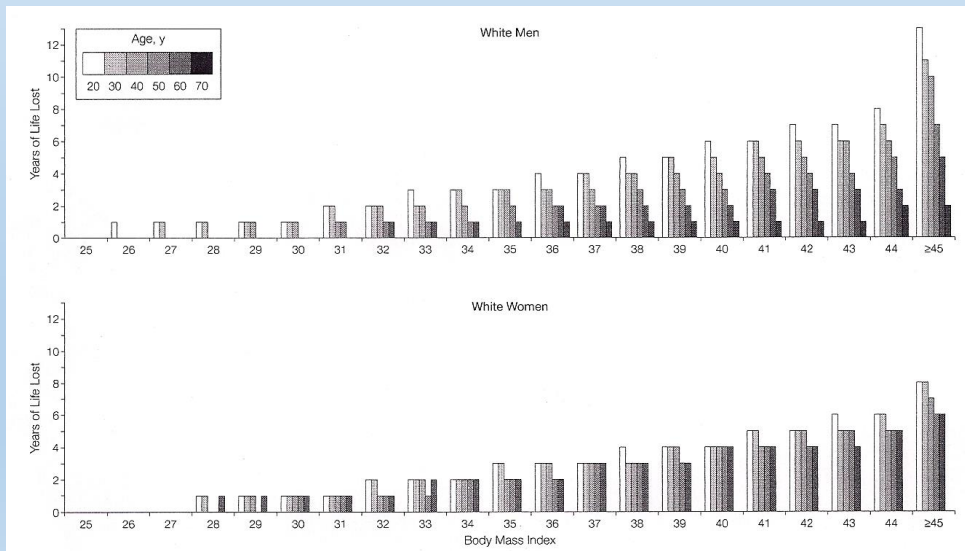
- Score assigned represents an assessment of reversibility of that condition
 - Lifestyle
 - Hypertension
 - Dyslipidaemia
 - Urology
 - GORD
 - Mild arthritis
 - Arthritis with significant limitation
 - NASH
 - Obstetric/gynaecological issues
 - Infertility
 - OSA

Likelihood of achieving maximum benefit with respect to control of diabetes

- No diabetes/IGT/Diabetes
- Type of medication
 - Diet/oral
 - Insulin
- Duration of active treatment
 - <4 years
 - 4-7 years
 - >7 years
- Control achieved
 - HbA1c <53
 - HbA1c >53

Duration of Benefit

- “reversal of years of life lost” tables
 - Gender
 - BMI
 - Age



Surgical Risk

- If benefit is equal, lower risk patients should be treated first
- Relative risk
 - Male
 - Age>45
 - BMI>50
 - Hypertension
 - Risk of PE (h/o superficial or deep venous thrombosis, previous PE, coagulation abnormalities, use of OCP, malignancy)

Example patients

- Female/43 years/BMI 47
- Prioritisation Score 28
- Reversal years life lost - 6yrs
- Surgical Risk - normal or slight increase
- Booking Status – Return to GP

- Male/43 years/BMI 47
- Prioritisation Score 31
- Reversal years life lost – 9yrs
- Surgical Risk – normal or slight increase
- Booking Status – Return to GP

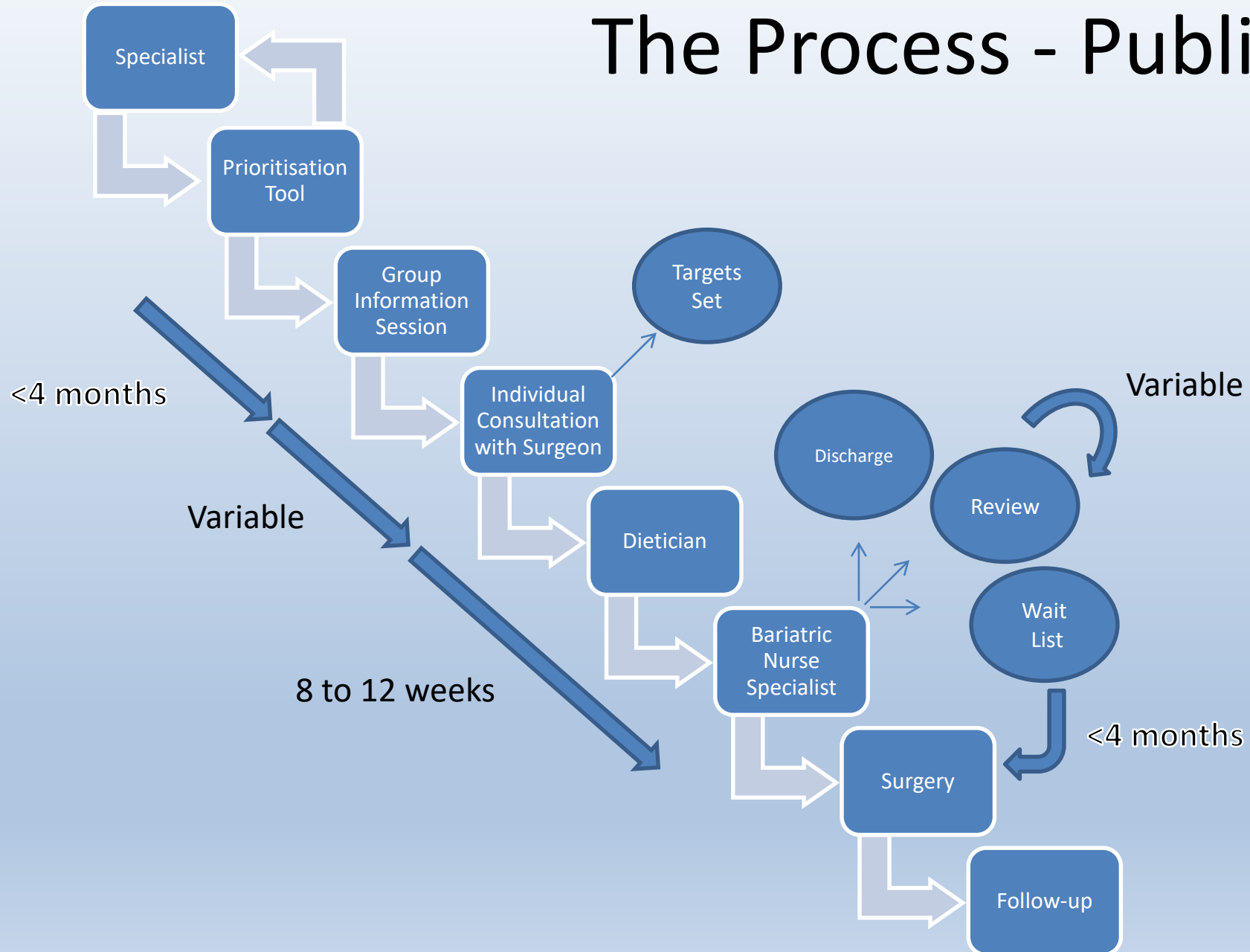
Example patients

- Female/43 years/BMI 47
 - T2DM<4yrs/HbA1c<53
 - Prioritisation Score 65
 - Reversal years life lost - 6yrs
 - Surgical Risk - normal or slight increase
 - Booking Status – given certainty
- Male/43 years/BMI 47
 - T2DM<4yrs/HbA1c<53
 - Prioritisation Score 68
 - Reversal years life lost - 9yrs
 - Surgical Risk - normal or slight increase
 - Booking Status – given certainty

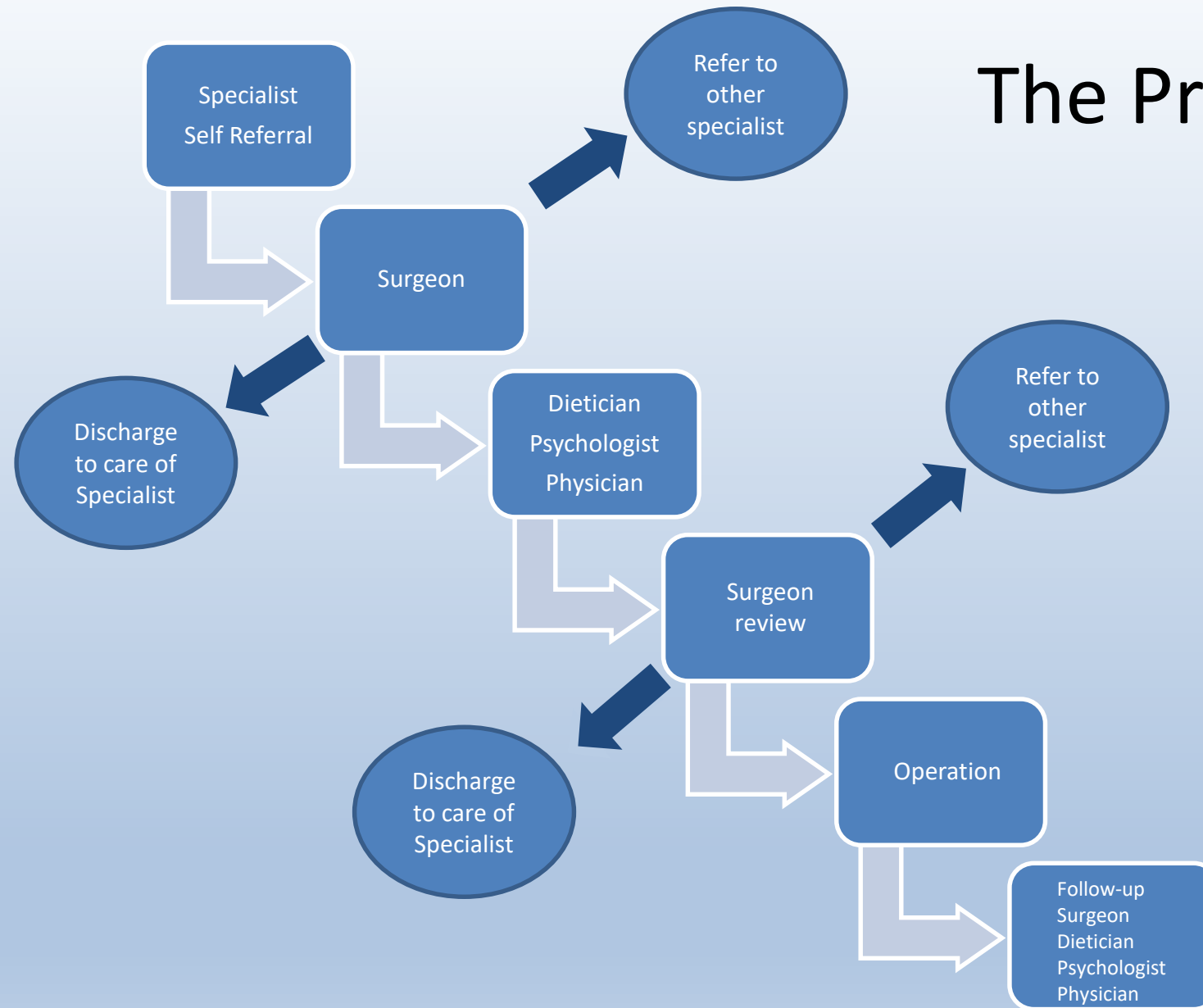
Example patients

- Female/43 years/BMI 47
 - HT/Lipids/OSA
 - Prioritisation Score 44
 - Reversal years life lost - 6yrs
 - Surgical Risk - normal or slight increase
 - Booking Status – return to GP
- Male/43 years/BMI 47
 - HT/Lipids/OSA
 - Prioritisation Score 43
 - Reversal years life lost - 6yrs
 - Surgical Risk – moderately increased
 - Booking Status – return to GP

The Process - Public



The Process - Private



Perioperative

- Preop:
 - Optifast diet (VLCD) 2-4 weeks
- Operative:
 - Primary/Revisional
 - Laparoscopic Gastric Sleeve / Laparoscopic Gastric Bypass
 - ERAS Bariatric protocol
 - 1-3 days in hospital
 - Commenced on liquids/pureed
- Post Op:
 - Diet: Liquids, Pureed, soft diet, normal diet
 - Medications: Analgesics, antiemetics, Omeprazole, multivitamins
 - Regular follow-up
 - Regular blood tests

Weight Loss

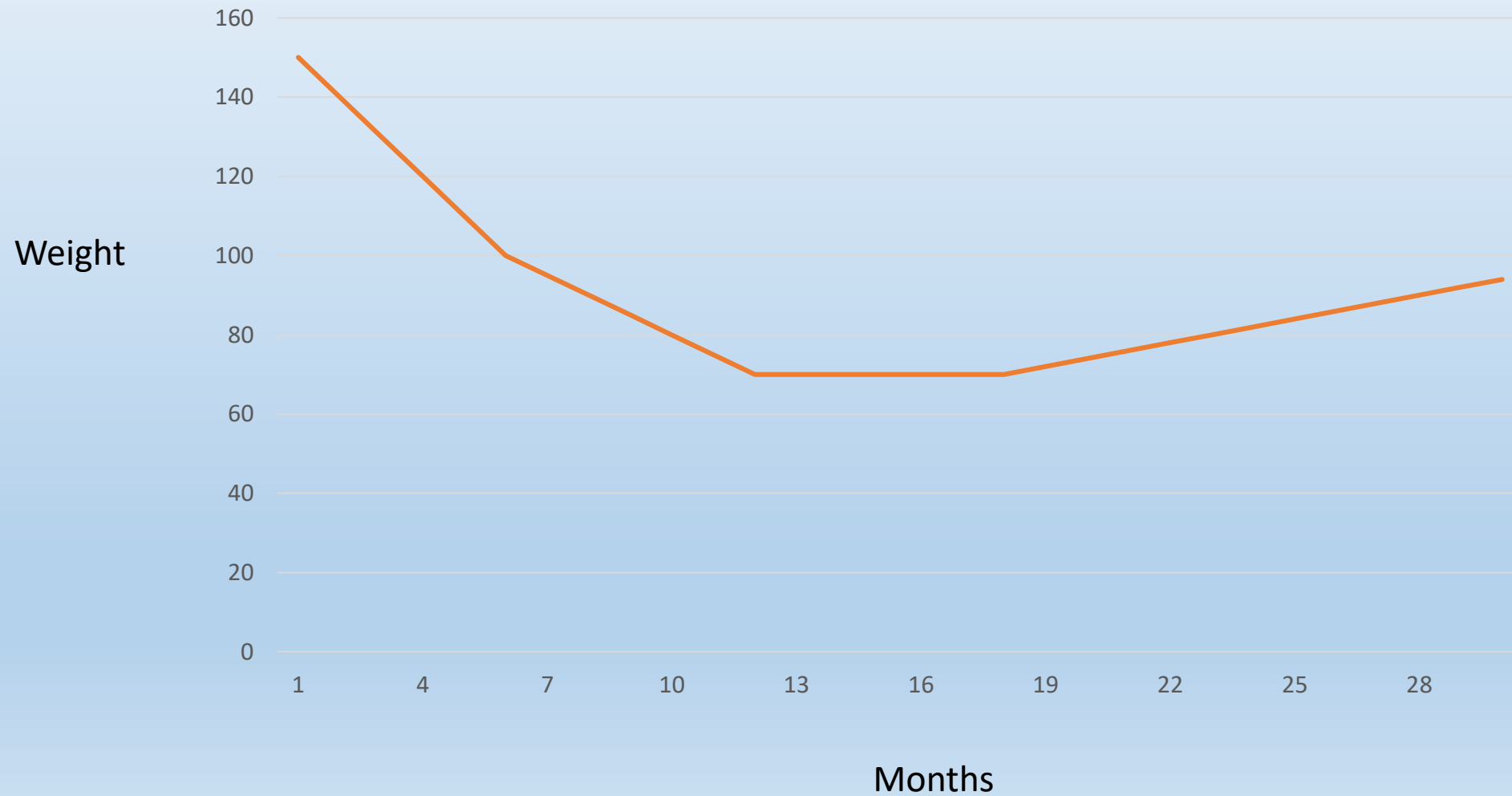
- How much?

• Procedure	%EWL
• Gastric Band	50%
• Gastric Sleeve	60%
• Gastric Bypass	70%

- What is Excess Weight?

- Wt 83kg, Ht 1.83m, BMI 25
 - Excess weight = 0kg
- Wt 143kg, Ht 1.83m, BMI 42.7
 - Excess weight = 60kg

Expected Weight Loss



Comorbidity resolution

- Diabetic?
 - Stop all diabetic meds day of surgery
 - Diabetic remission is not dependent on weight loss
 - Patient monitors BSL's
 - If increase, GP review
- OSA/HT/Hyperlipidaemia?
 - GP review within 3 months
 - Adjust medications
 - Continue/Reduce/Stop
 - Remission is weight dependent

Follow up

- Surgeon
 - 2 weeks (critical period)
 - 6 weeks
 - 3 months (blood test)
 - 6 months (blood test)
 - 1 yr (blood test)
 - Annually (blood test)
 - As needed
- Dietician

Complications

If you are concerned about any
patient post bariatric surgery....



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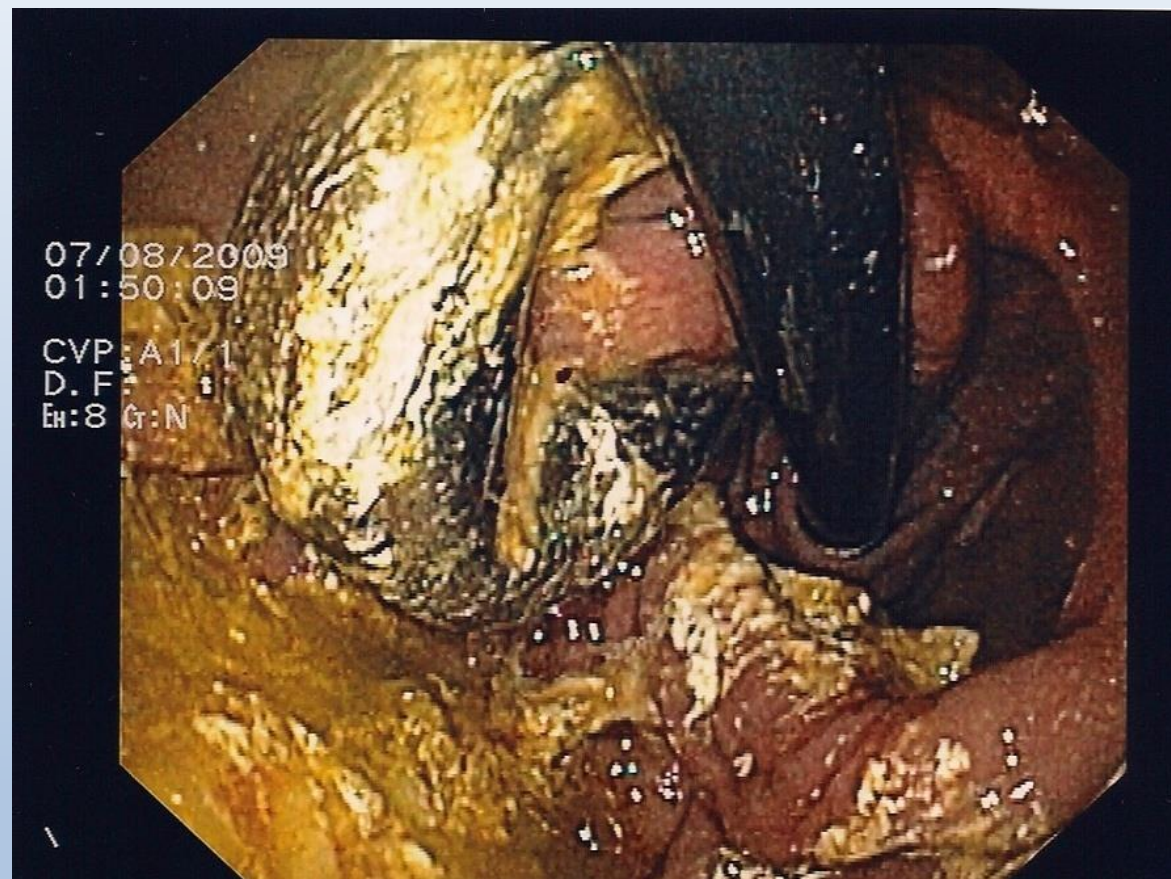


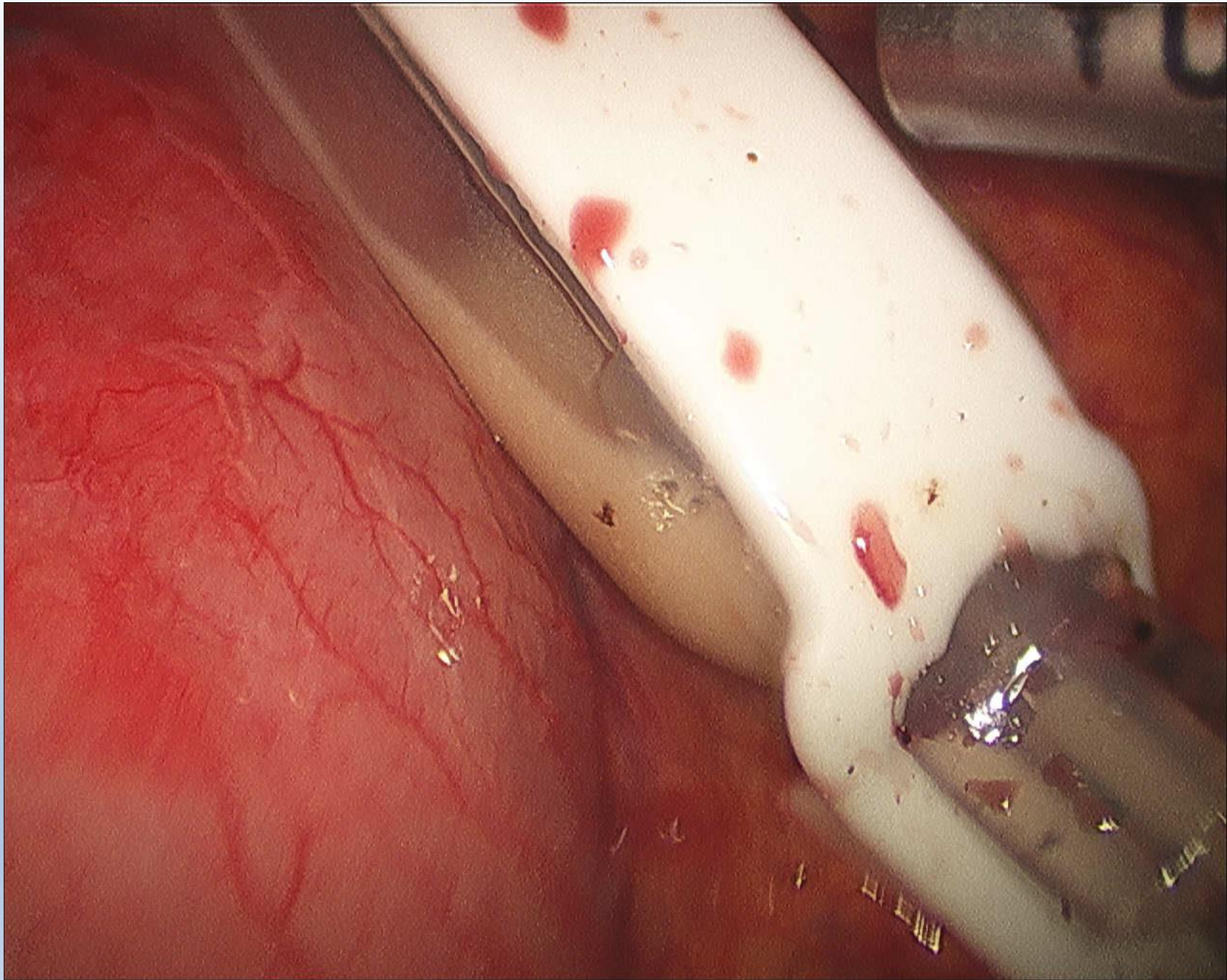
Band Problems and Limitations

- SURGICAL
- Early
 - Port site infection
 - Port inaccessibility
 - Prosthetic failure (leak/disconnection/puncture)
- Late
 - Pouch dilatation
 - Band slippage (?emergency)
 - Oesophageal dilatation
 - Food bolus obstruction
 - Gastric erosion
 - Delayed port infection
 - Revision rate
 - 3-4% re-operation rate /year
 - Mortality 1 / 2000
- CLINICAL
 - Dysphagia
 - Intensive follow-up
 - 4 weekly 12-18 months
 - No discharge
 - Experienced clinician
 - Geography
 - Loss to f/u = failure
 - Patient intolerance/dissatisfaction









Southern
X-Ray C1
09
15



Sleeve Complications

Early

- Death (1/1000)
- Leak (1-2%)
- Bleeding (1%)
- Prolonged Hospitalisation
- Further surgery/Procedures
- Infection
- DVT/PE
- MI
- CVA
- Anaesthetic risks

Late

- Leak
- Hernia
- Stricture
- Reflux

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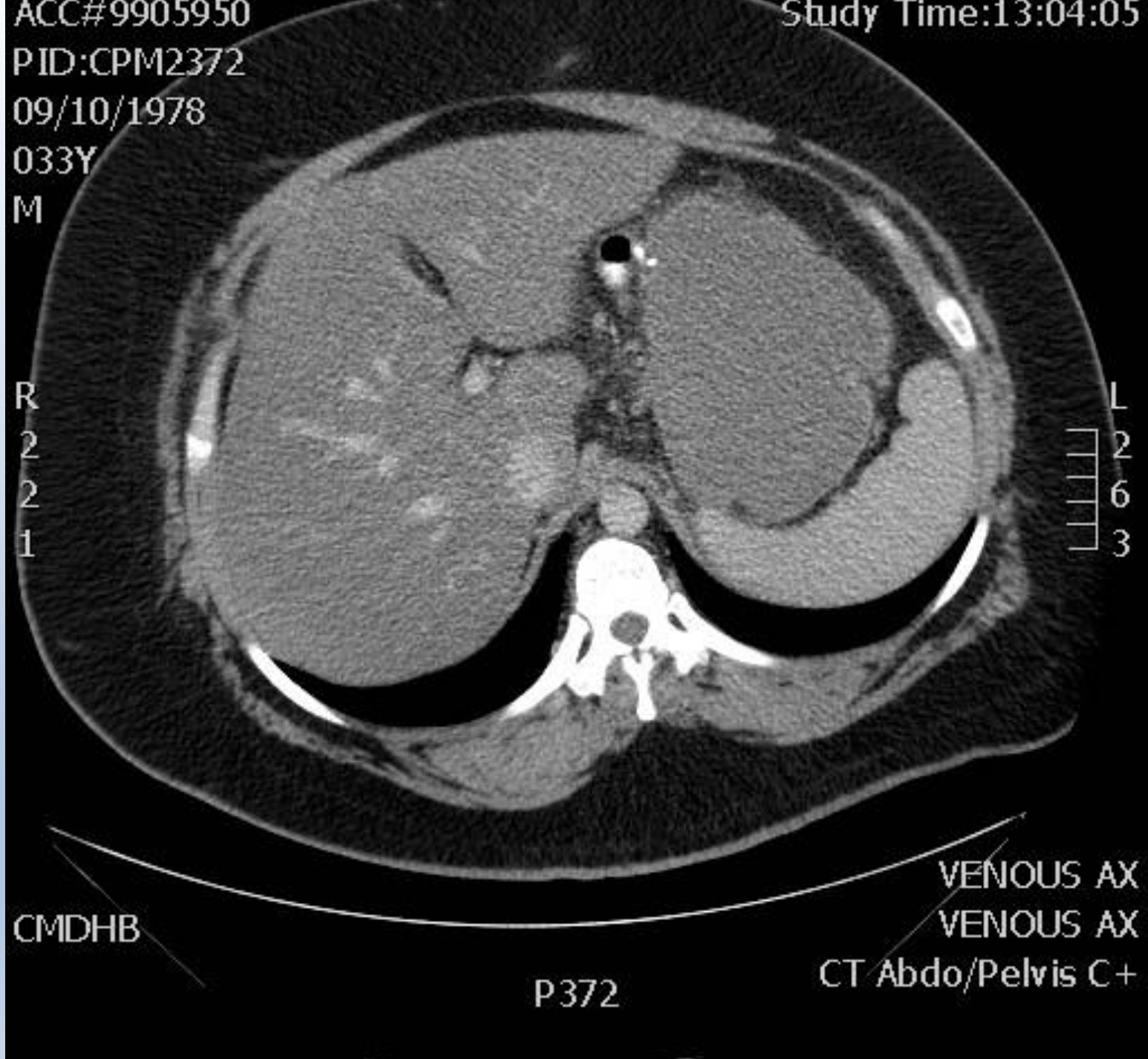
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CMDHB

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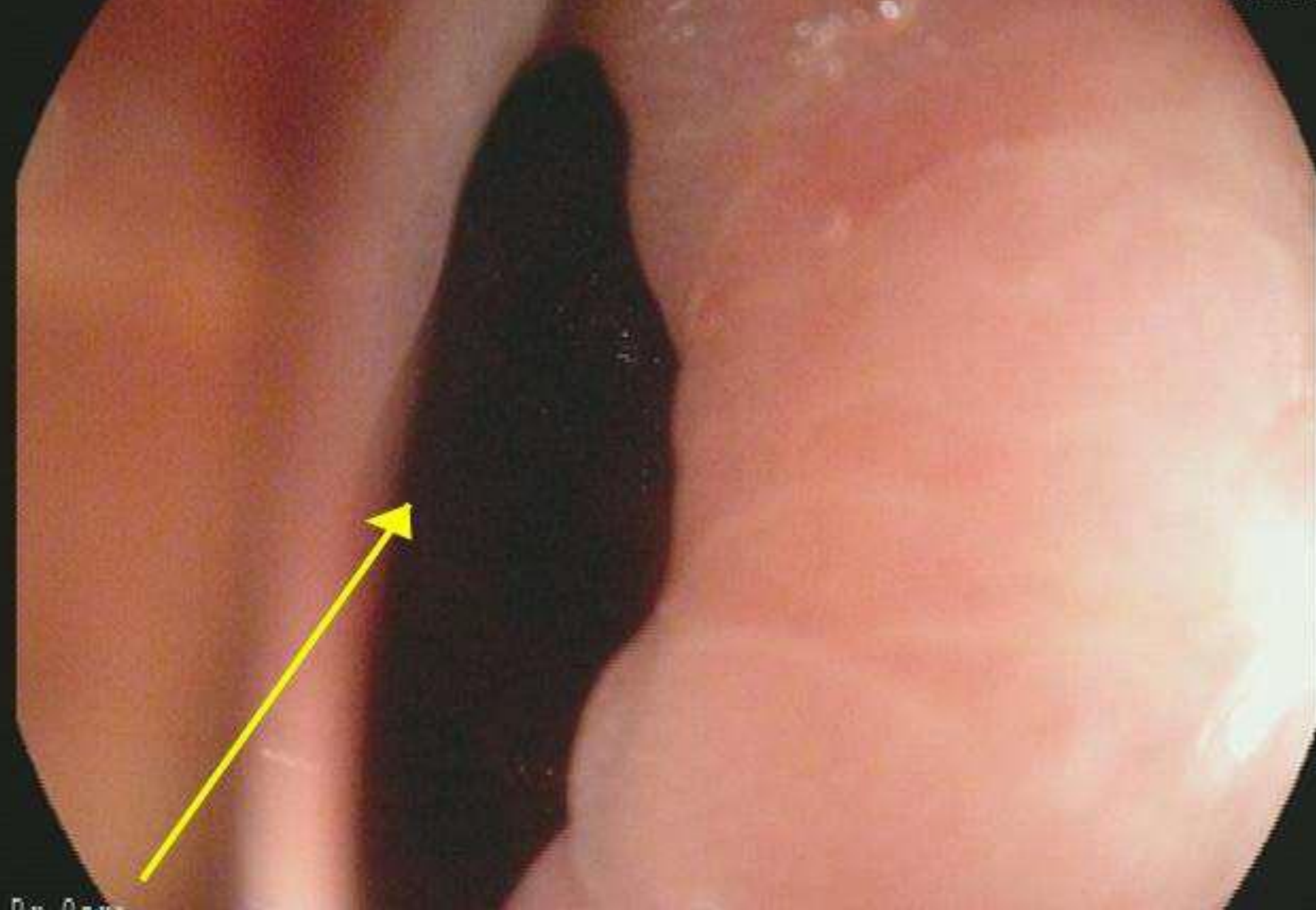
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VENOUS AX
CT Abdo/Pelvis C+



NAME

Sep/14/2011

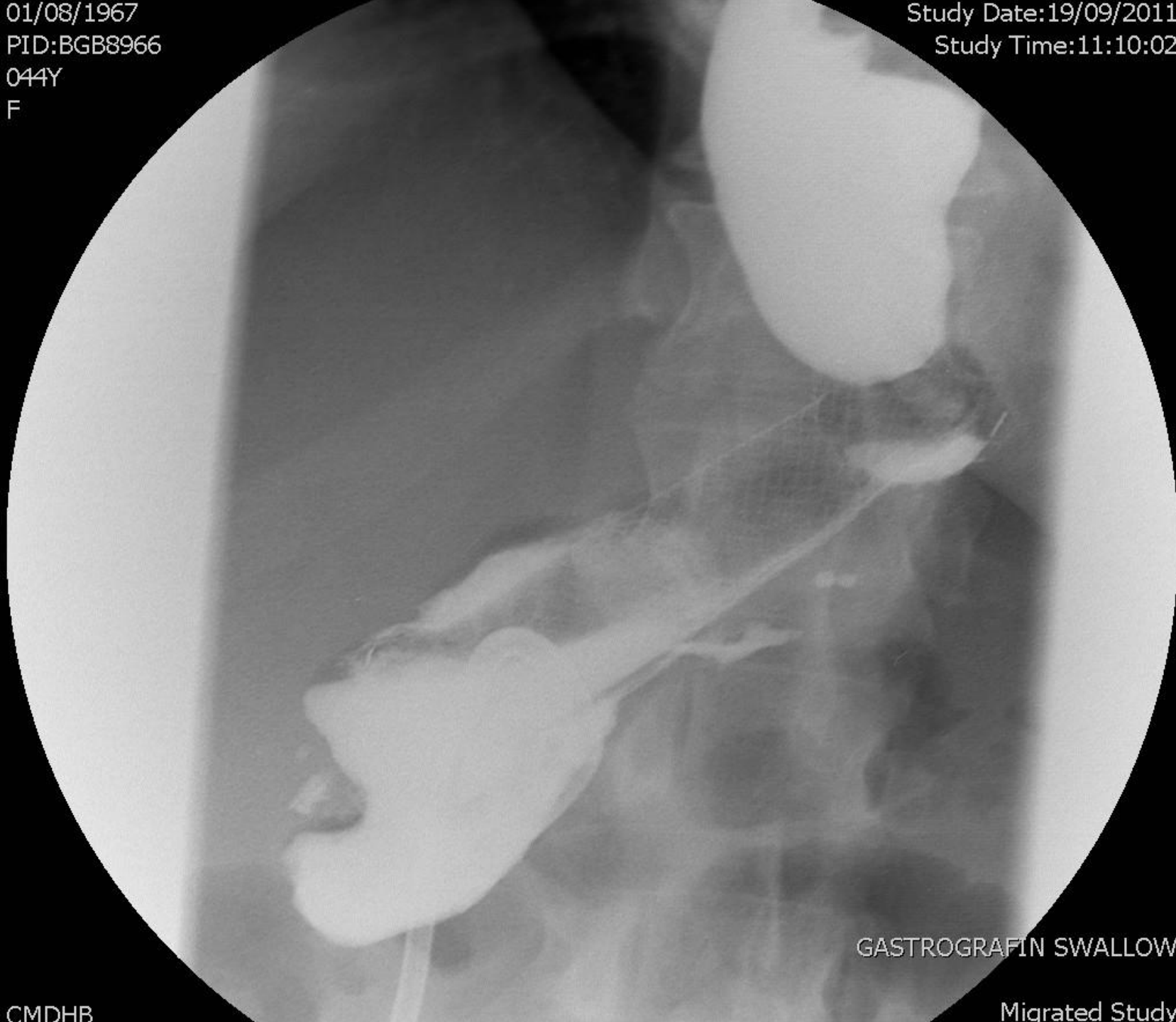
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GASTROGRAFIN SWALLOW

CMDHB

Migrated Study

Bypass Complications

Early

- Death (1/500)
- Leak
- Bleeding
- Prolonged Hospitalisation
- Further Surgery/Procedures
- Infection
- DVT/PE
- MI
- CVA
- Anaesthetic risks

Late

- Leak
- Stomal stenosis
- Stomal dilation
- Marginal ulceration
- Dumping Syndrome
- Internal Hernia/SBO
- Nutritional deficiencies

