

Laparoscopic surgery today and in the future

HISTORY OF THE LAPAROSCOPIC SURGERY



1911 Hans C. Jacobsen
– thoracoscopy, explorative
laparoscopy, liver inspection,
tuberculosis



1934 John C. Ruddock – trocars,
peritoneoscopy, biopsy (Kassel, USA)

HISTORY OF THE LAPAROSCOPIC SURGERY



1938 J. Veress (Hungary – needle for the tuberculosis treatment



1970 Kurt Semm –laparoscopic surgery in gynaecological department, insuflator, 1980 – laparoscopic appendectomy (Kiel)

HISTORY OF THE LAPAROSCOPIC SURGERY



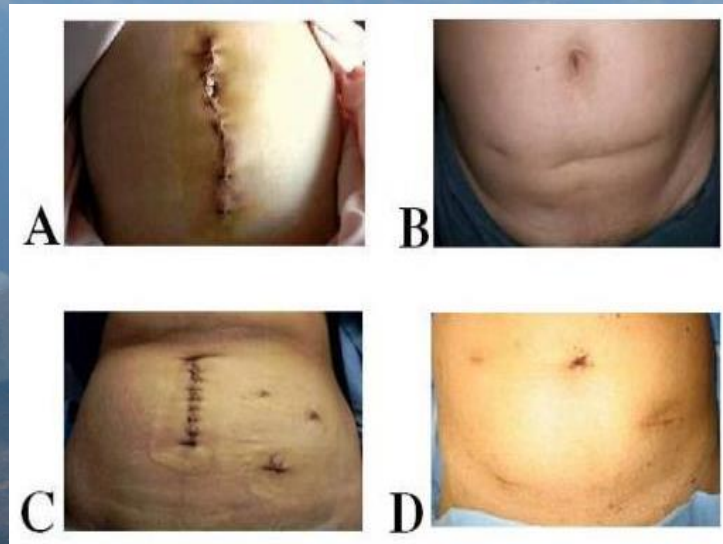
1983 Philippe Mouret –
appendectomy
1987 - cholecystectomy
(Lyon)



1985 Erich Mühe –cholecystectomy
(Nurmburg, Erlangen)

Advantages of the laparoscopy

- Better cosmetic effect
- Less pain
- Lower infections rate of the wound



Advantages of the laparoscopy

- Shorter hospital stay
- Less postoperative immunosuppression
- Faster return to work
- Less cost



Progress in laparoscopy

- 1911 diagnostic laparoscopy - Jacobeus
- 1970 release of adhesions - Semm
- 1980 appendectomy - Semm
- 1985 cholecystectomy - Muhe
- 1991 colectomy- Jacobs, Lacy
- 1991 fundoplication - Dellamange, Perissat
- 1991 splenectomy - Delaitre
- 1991 TAPP - Arregui
- 1992 pancreatic tail resection - Gagner

Progress in laparoscopy

- 1992 TEP - Dulucq
- 1992 adrenalectomy - Gagner
- 1994 pancreatic cyst - Frantzides, Gagner, Petelin
- 1994 PPPDX (pylorus preserving pancreatoduodenectomy) - Gagner, Pomp
- 1995 pancreatic necrosectomy - Gagner
- 1996 parathyroidectomy— Gagner
- 2001 Lindbergh operation



Laparoscopy nowadays

„Big surgeon – big incision”

Classical instruments



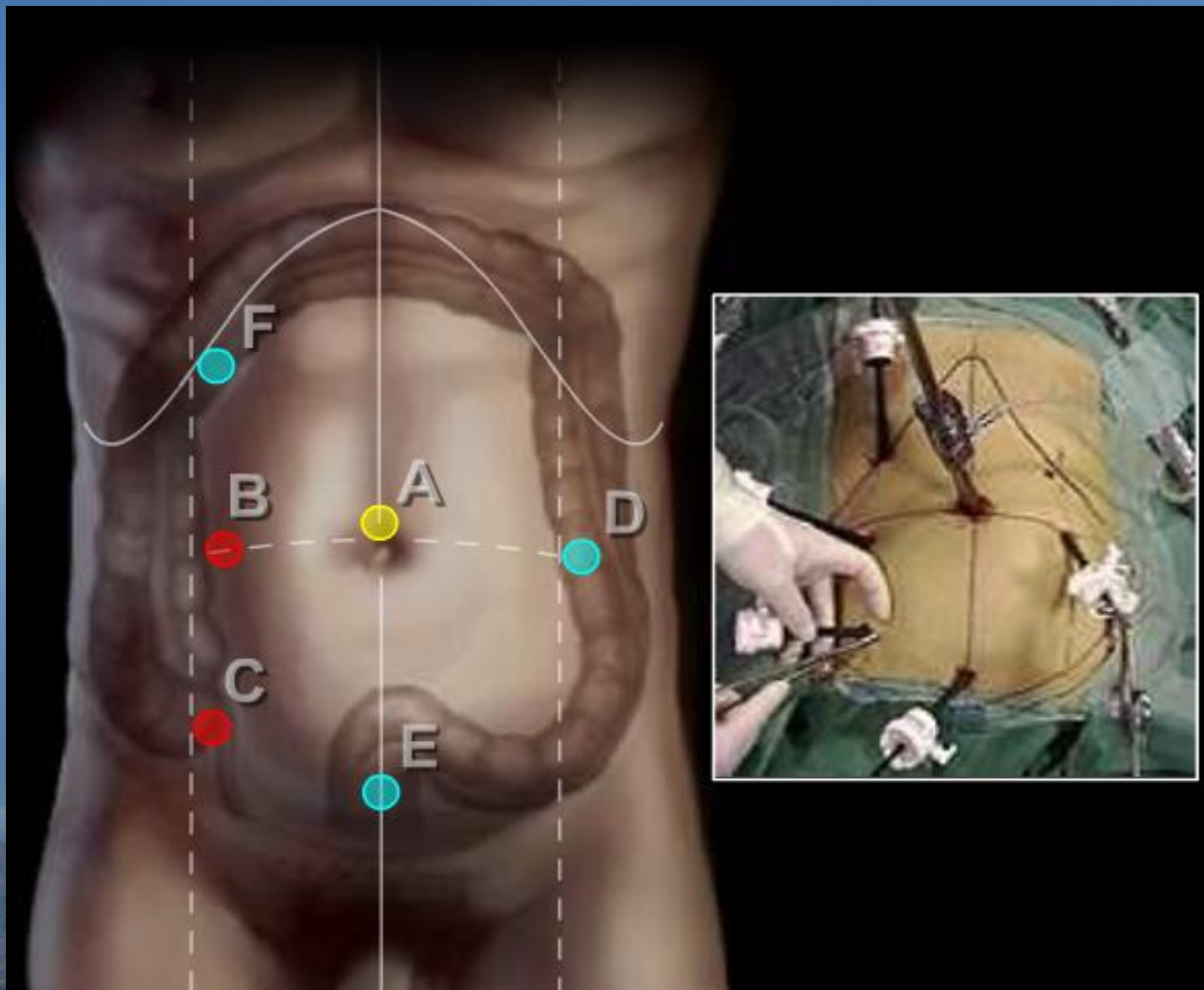
Laparoscopic instruments



Laparoscopy nowadays

laparoscopic equipment





Laparoscopy nowadays

Gallbladder and bile ducts surgery



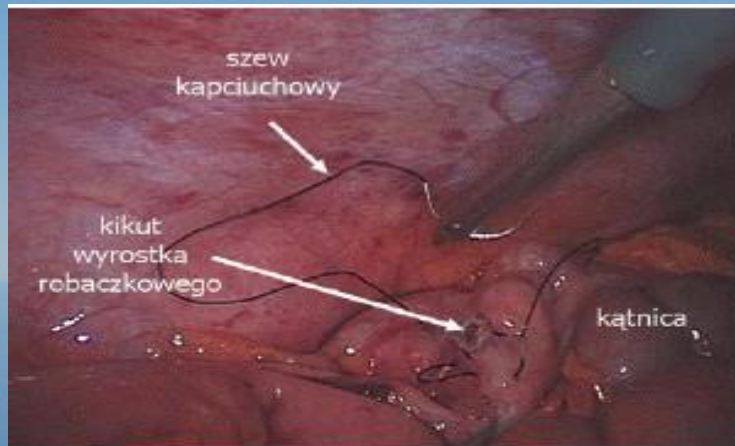
Laparoscopy nowadays

Surgery of the liver (cysts, tumors, metastases)

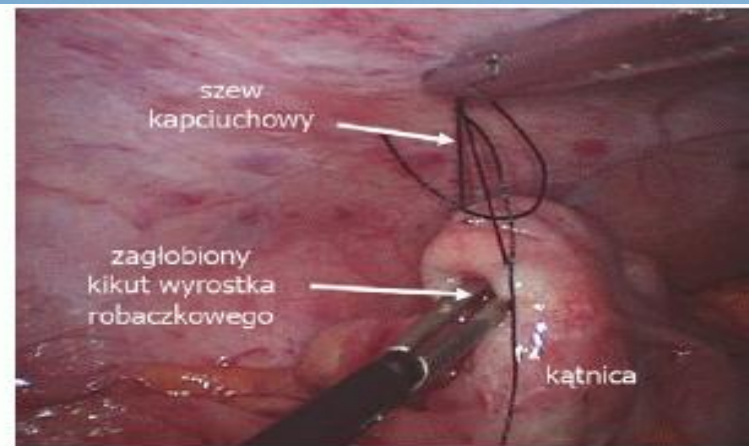


Laparoscopy nowadays

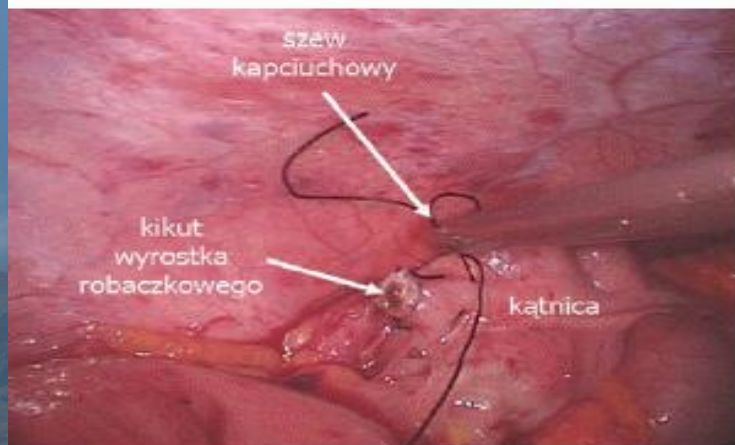
Appendectomy



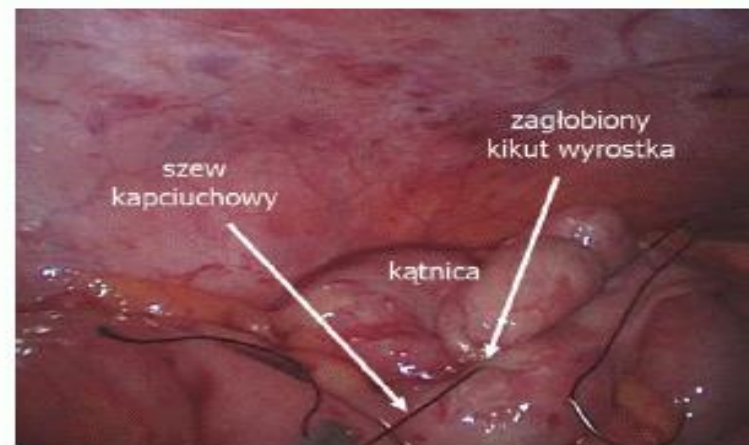
A



C



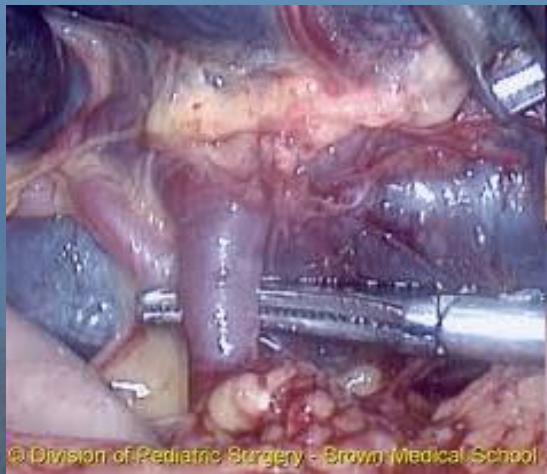
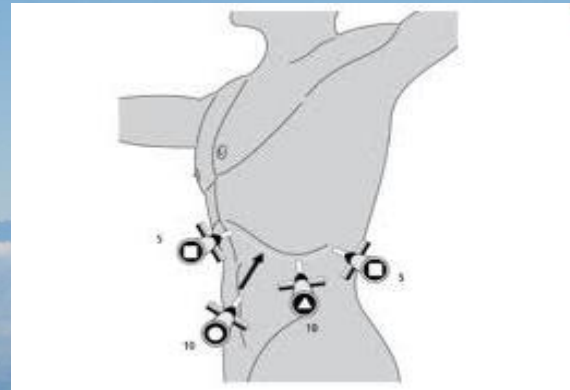
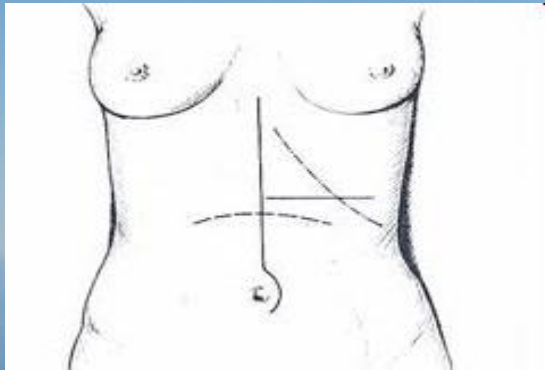
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D

Laparoscopy nowadays

Splenectomy



Laparoscopy nowadays

Stomach surgery

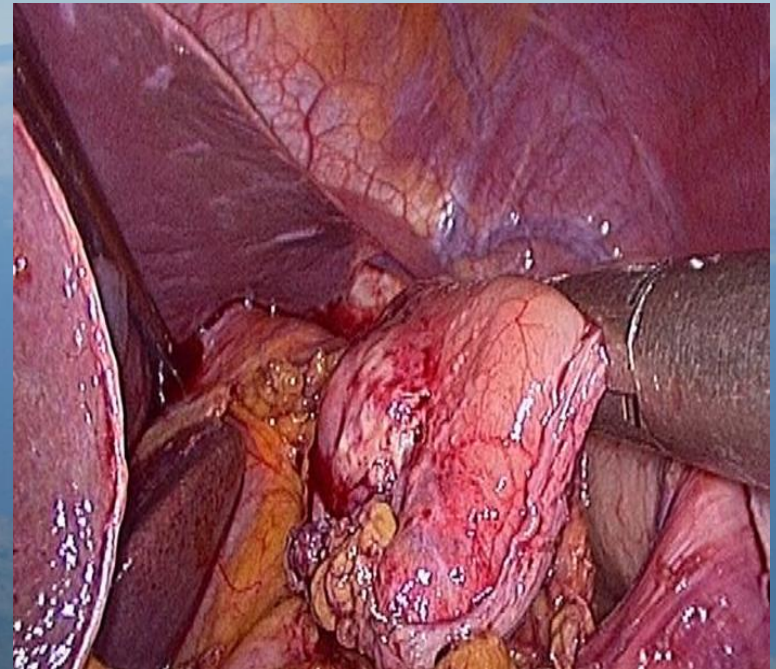
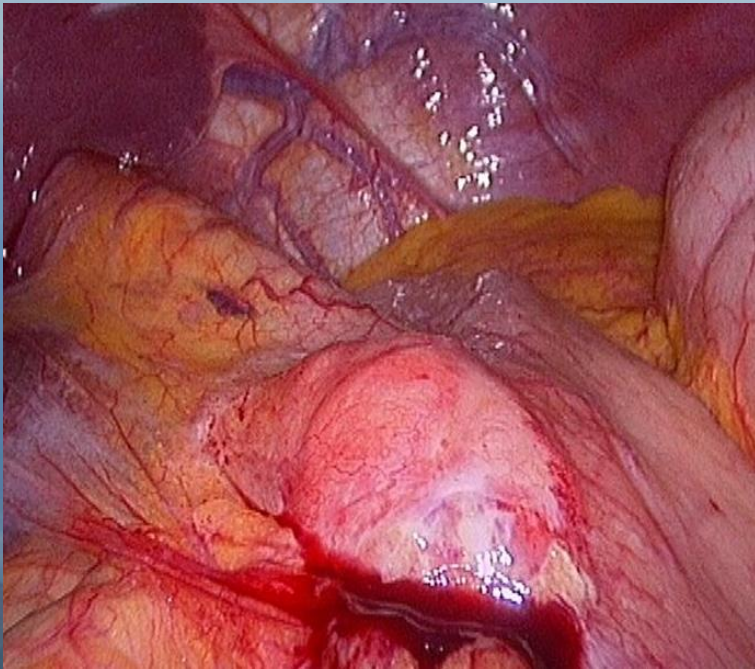
Laparoscopic suture of the perforated ulcer



Laparoscopy nowadays

Stomach surgery

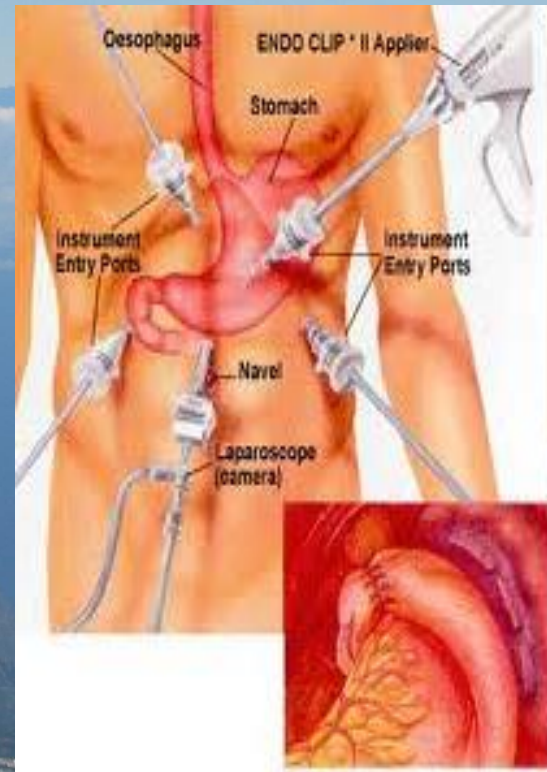
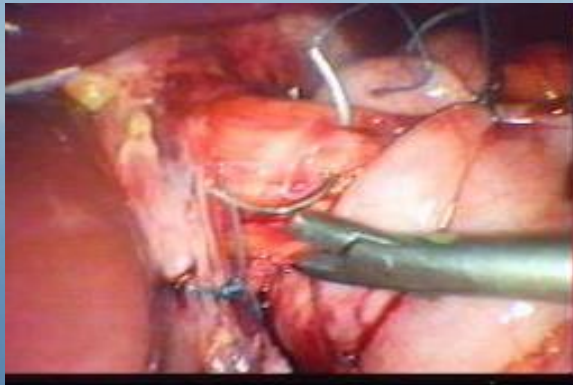
gastric resection – total or partial (benign tumors, gastric cancer)



Laparoscopy nowadays

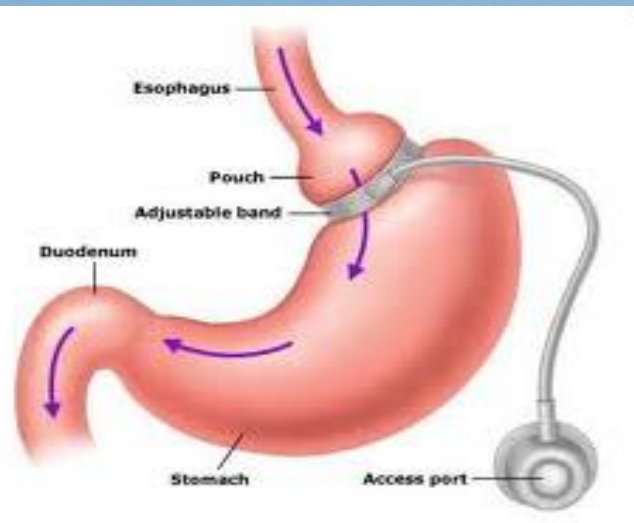
Stomach surgery

GERD, fundoplication, hiatal hernia



Laparoscopy nowadays

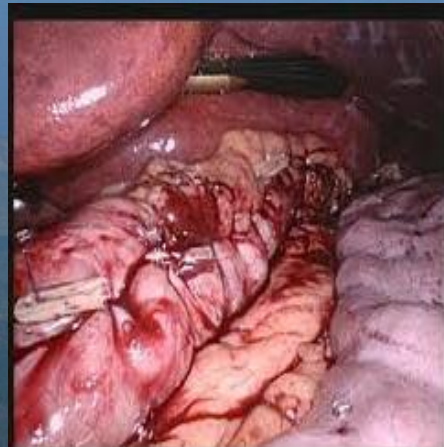
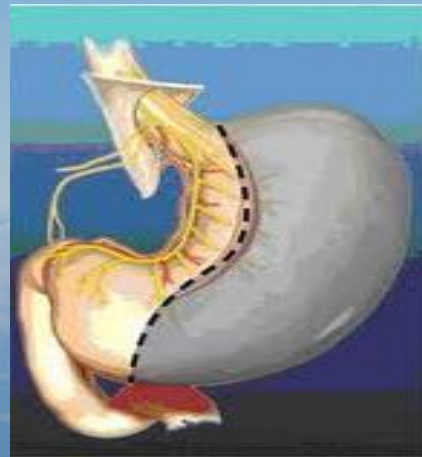
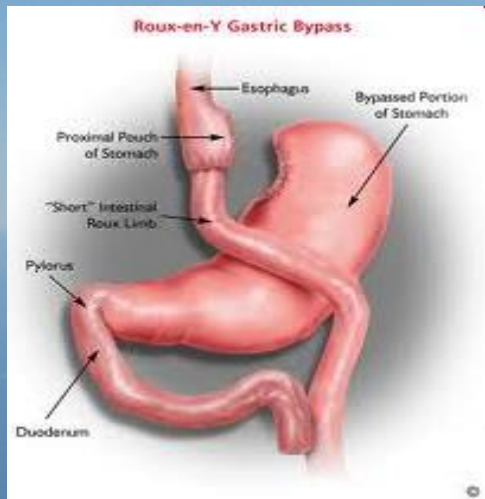
Bariatric surgery
Gastric banding



Laparoscopy nowadays

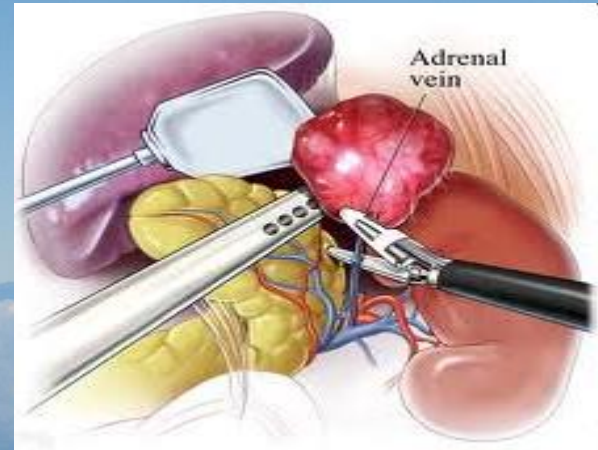
Bariatric surgery

Gastric bypass, sleeve gastrectomy



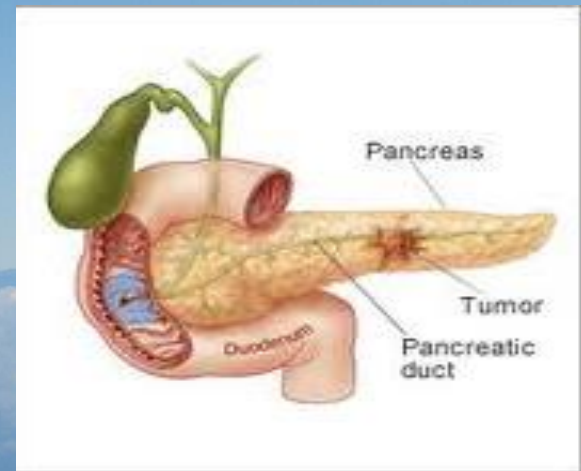
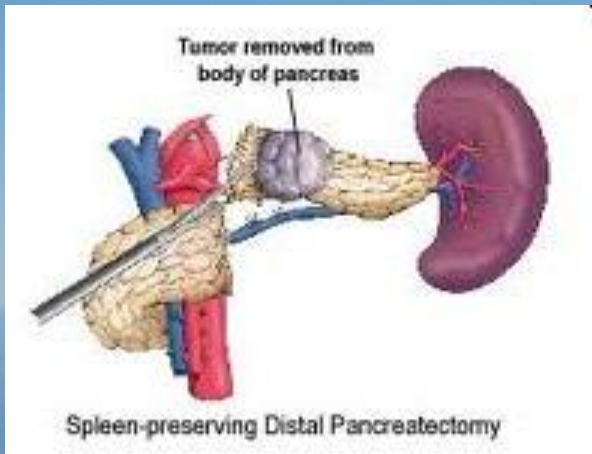
Laparoscopy nowadays

Adrenalectomy



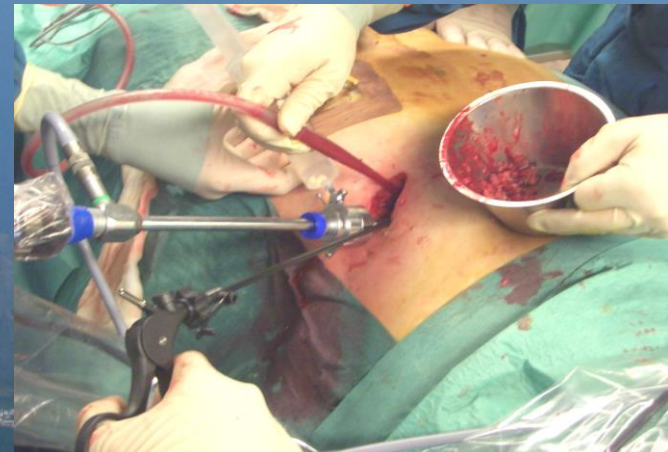
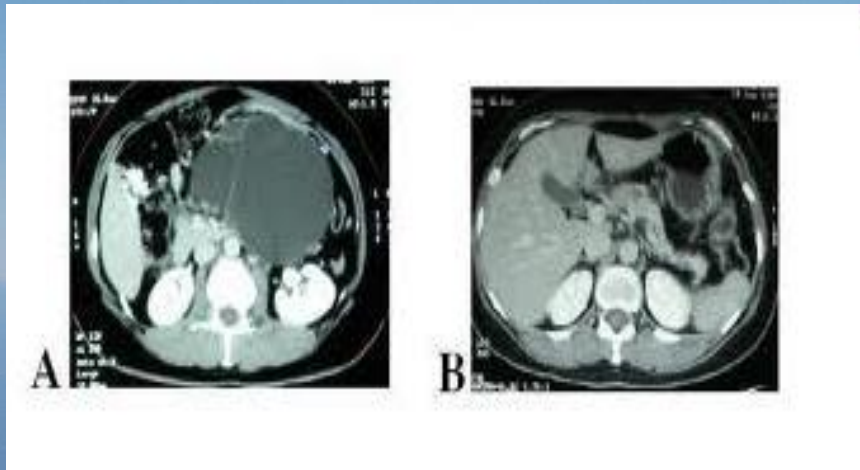
Laparoscopy nowadays

Pancreatic surgery – resection, insulinoma enucleation



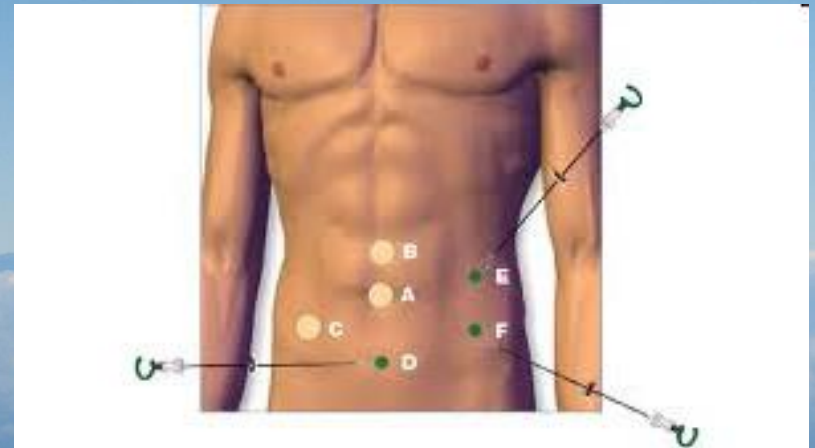
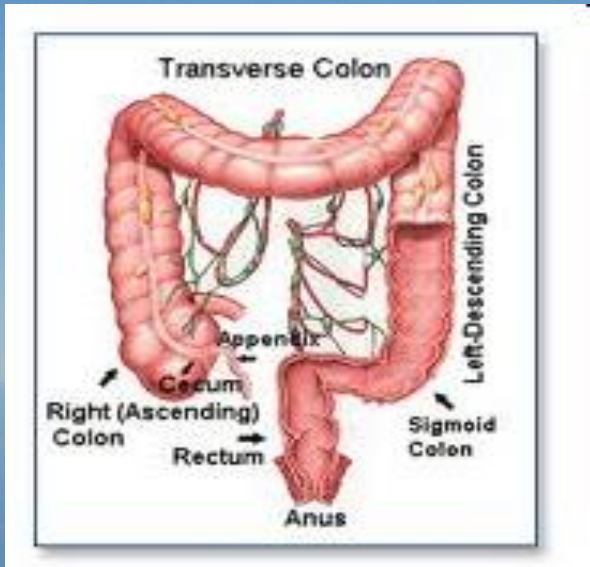
Laparoscopy nowadays

Pancreatic surgery – VARD – video assisted retroperitoneal debridement



Laparoscopy nowadays

Colon surgery



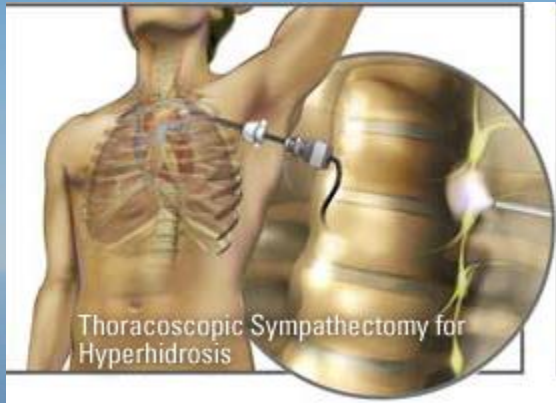
Laparoscopy nowadays

Rectal surgery – total mesorectal excision (TME), abdomino-perinael resection (APR)



Laparoscopy nowadays

Thoracoscopy
Sympathectomy



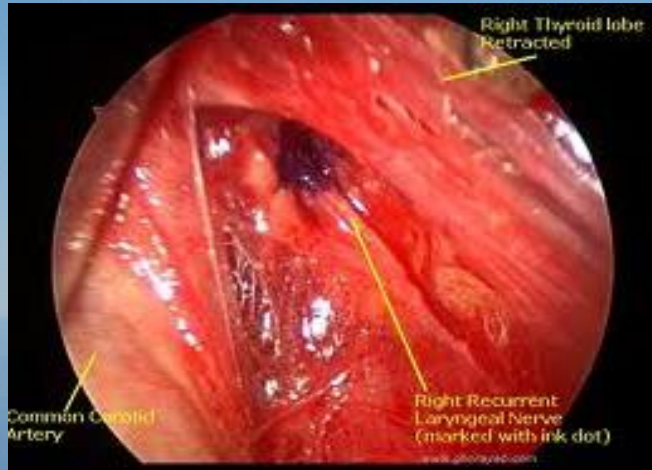
Laparoscopy nowadays

Thoracoscopy
Raynaude Syndrome



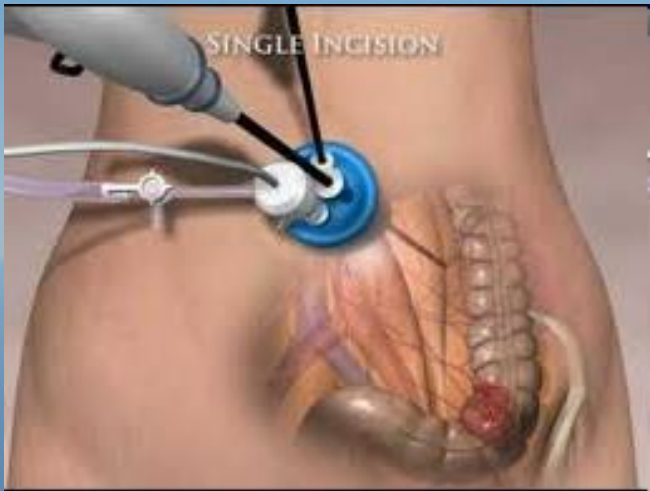
Laparoscopy nowadays

Minimal invasive thyroid resection



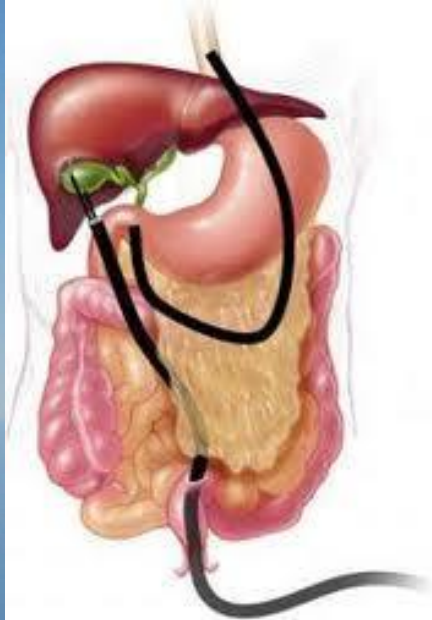
Laparoscopy - perspectives

Single port laparoscopic surgery



Laparoscopy - perspectives

NOTES



Laparoscopy - perspectives



Robotic surgery



Laparoscopy – perspectives

Nerosurgery ? Cardiosurgery?

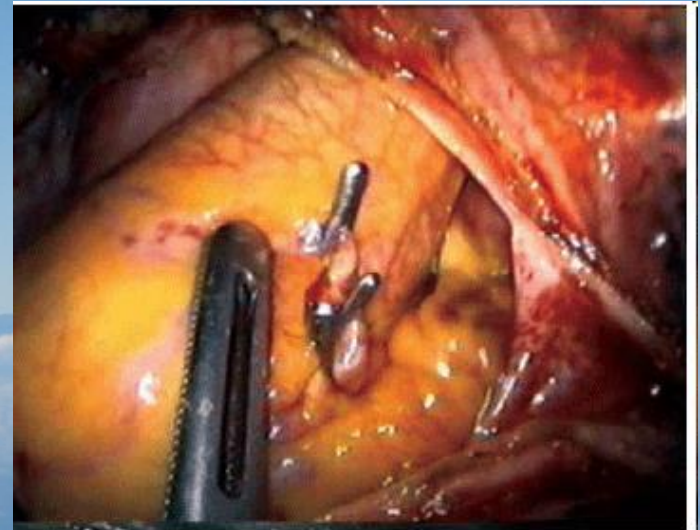
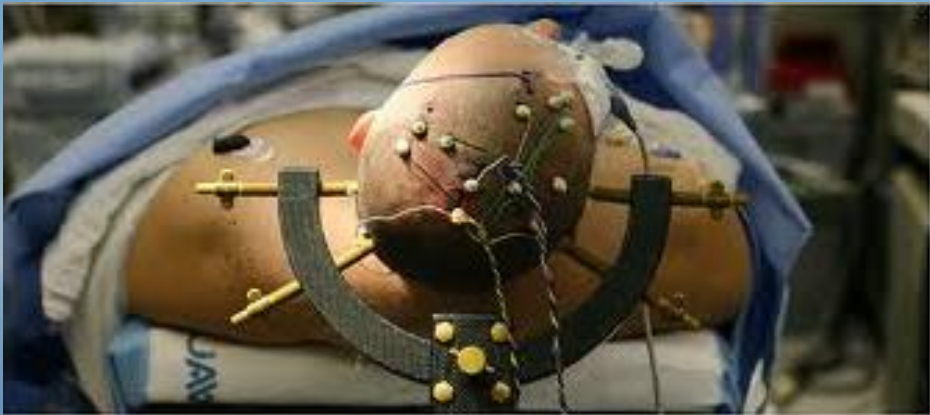


Fig. 2 – Videoendoscopic aspect of the coronary-pulmonary fistula ligature



