

Chirurgické vyšetřovací metody

Indikace k VTS/ VATS výkonům

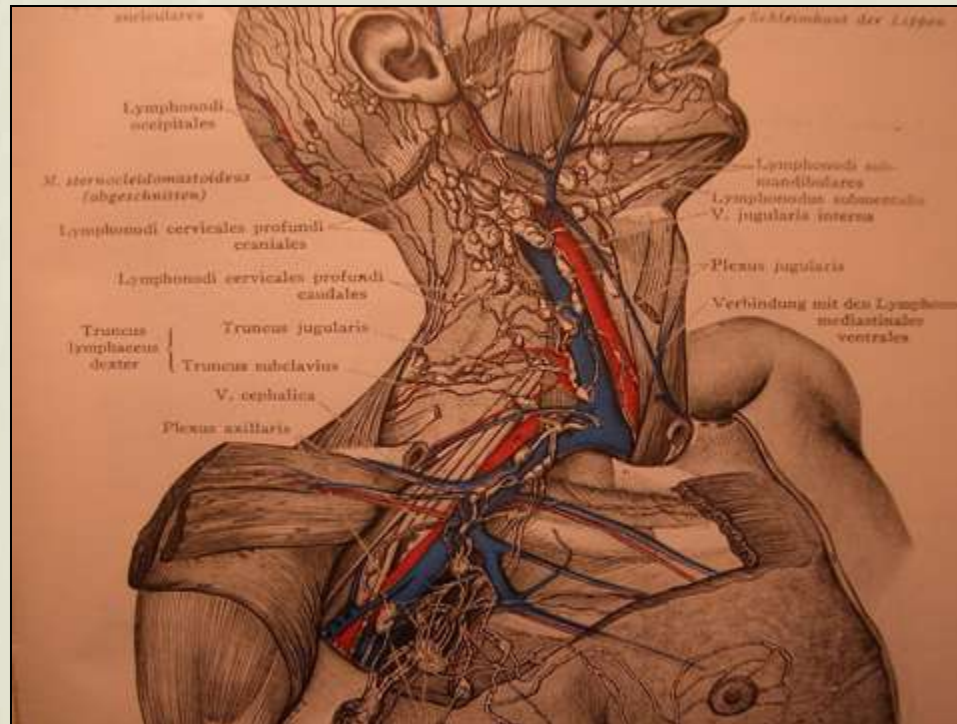
Oddělení hrudní chirurgie

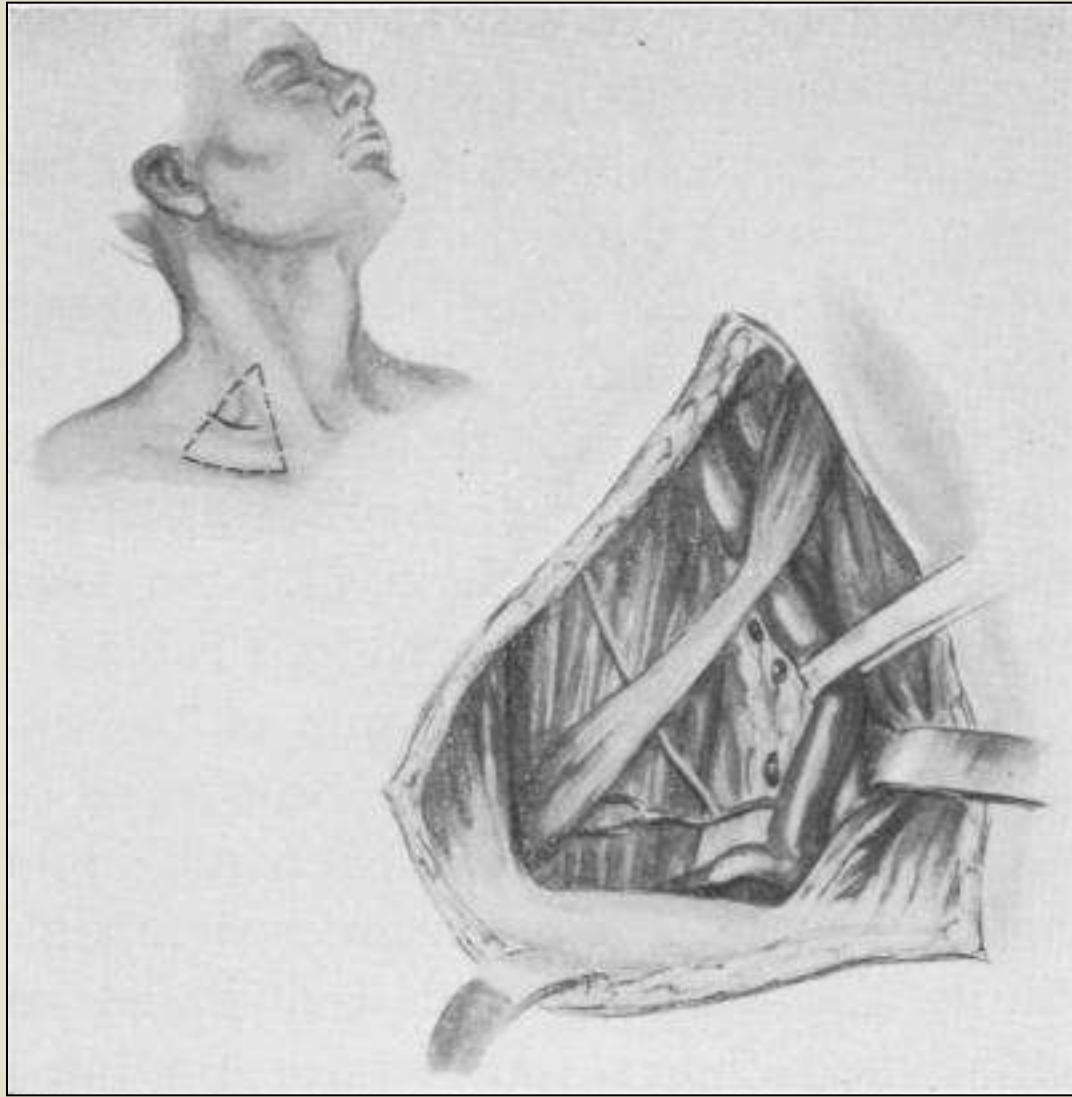
Thomayerovy nemocnice

Prim. MUDr. Vladislav Hytych, Ph.D.

Skalenová biopsie

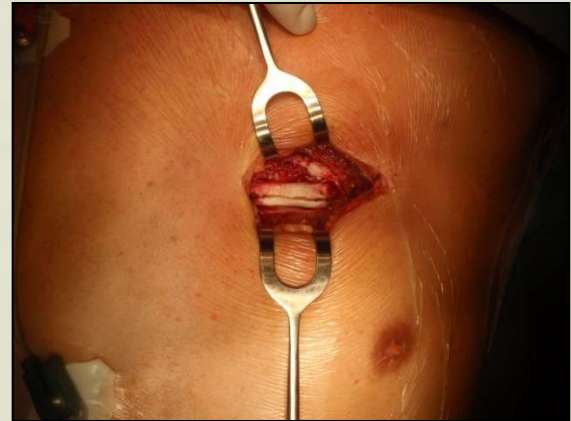
Daniels 1949

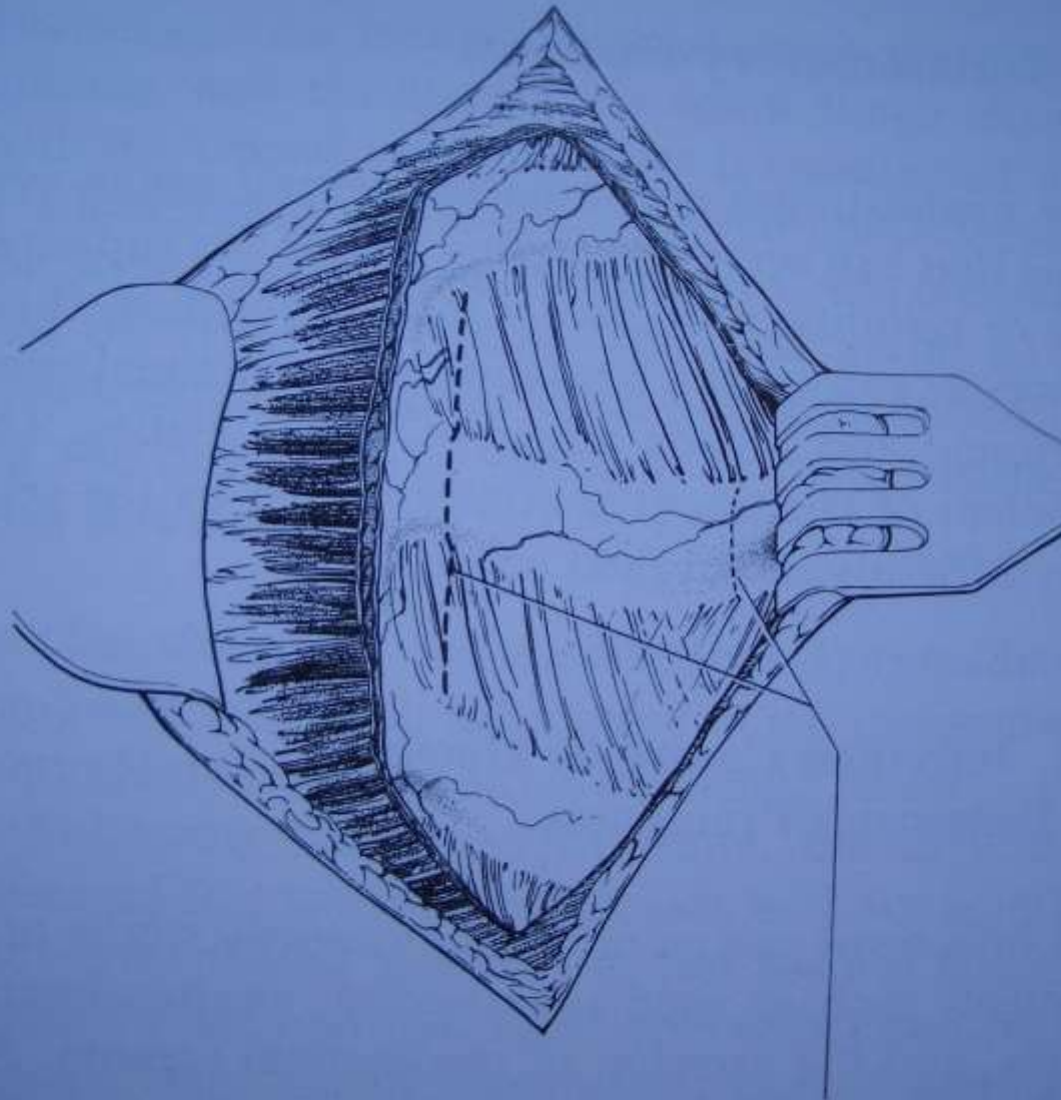




Parasternální mediastinotomie

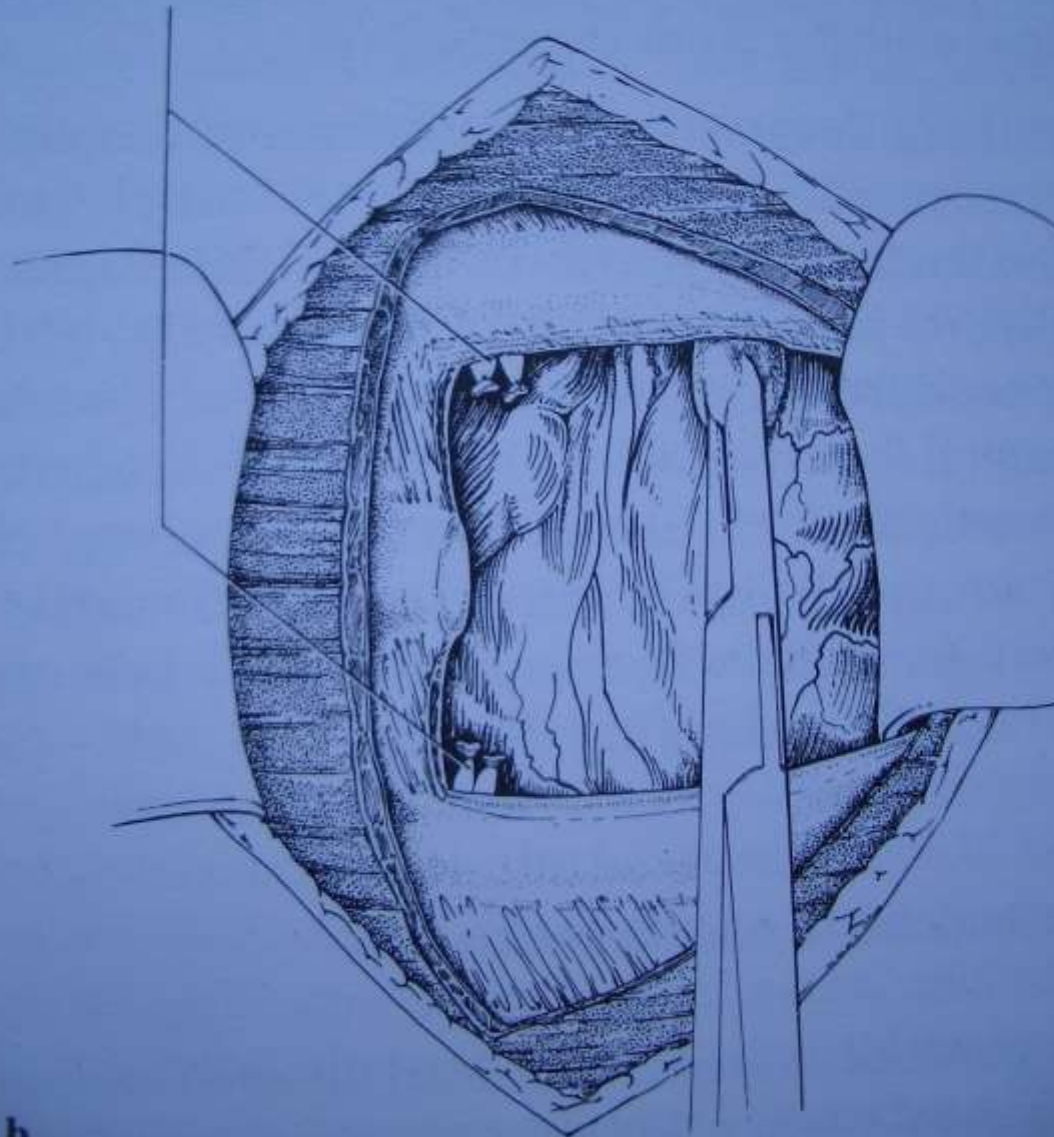
Grewe, Kremer 1963 Stemmer 1965





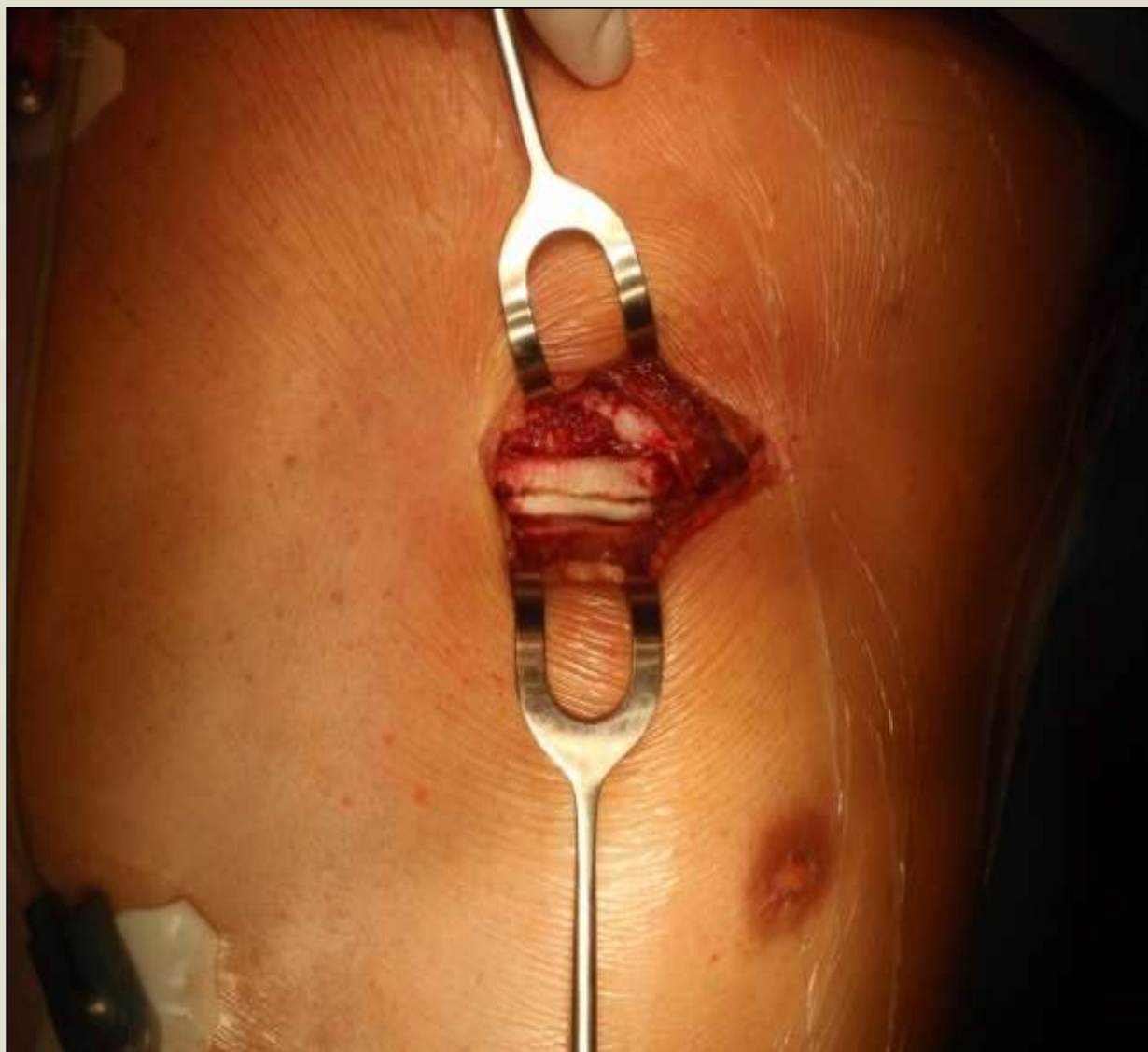
Limits of resection of rib cartilage

Internal mammary artery
and vein (ligated)



b



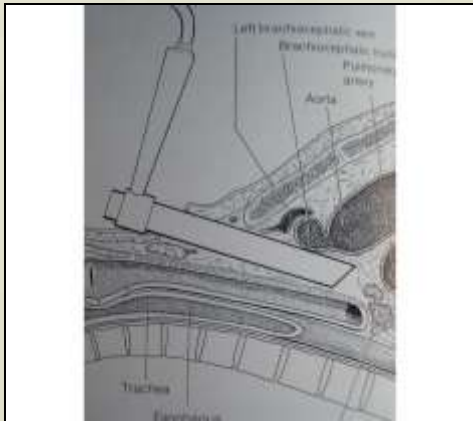
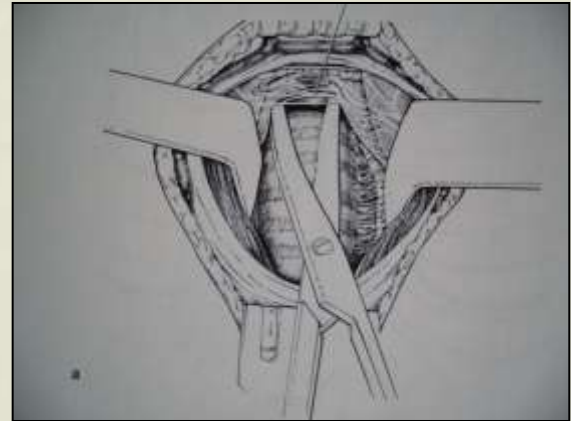


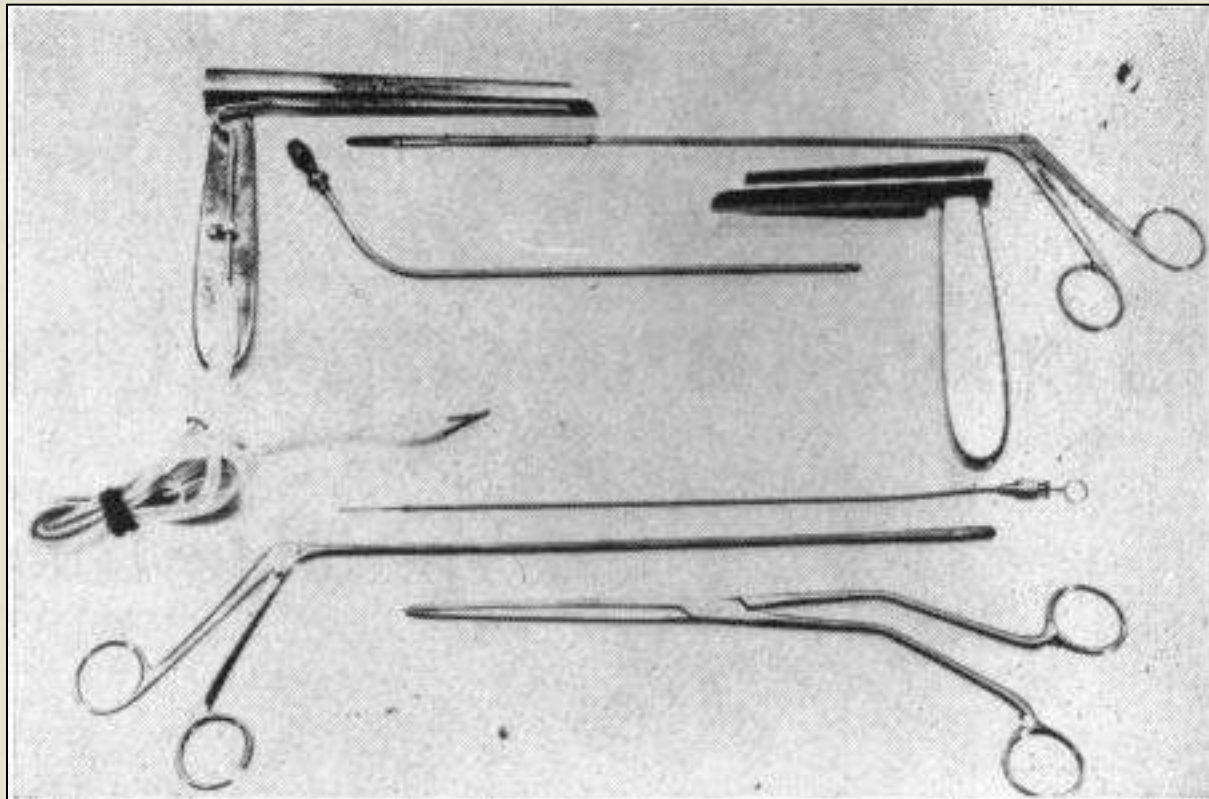


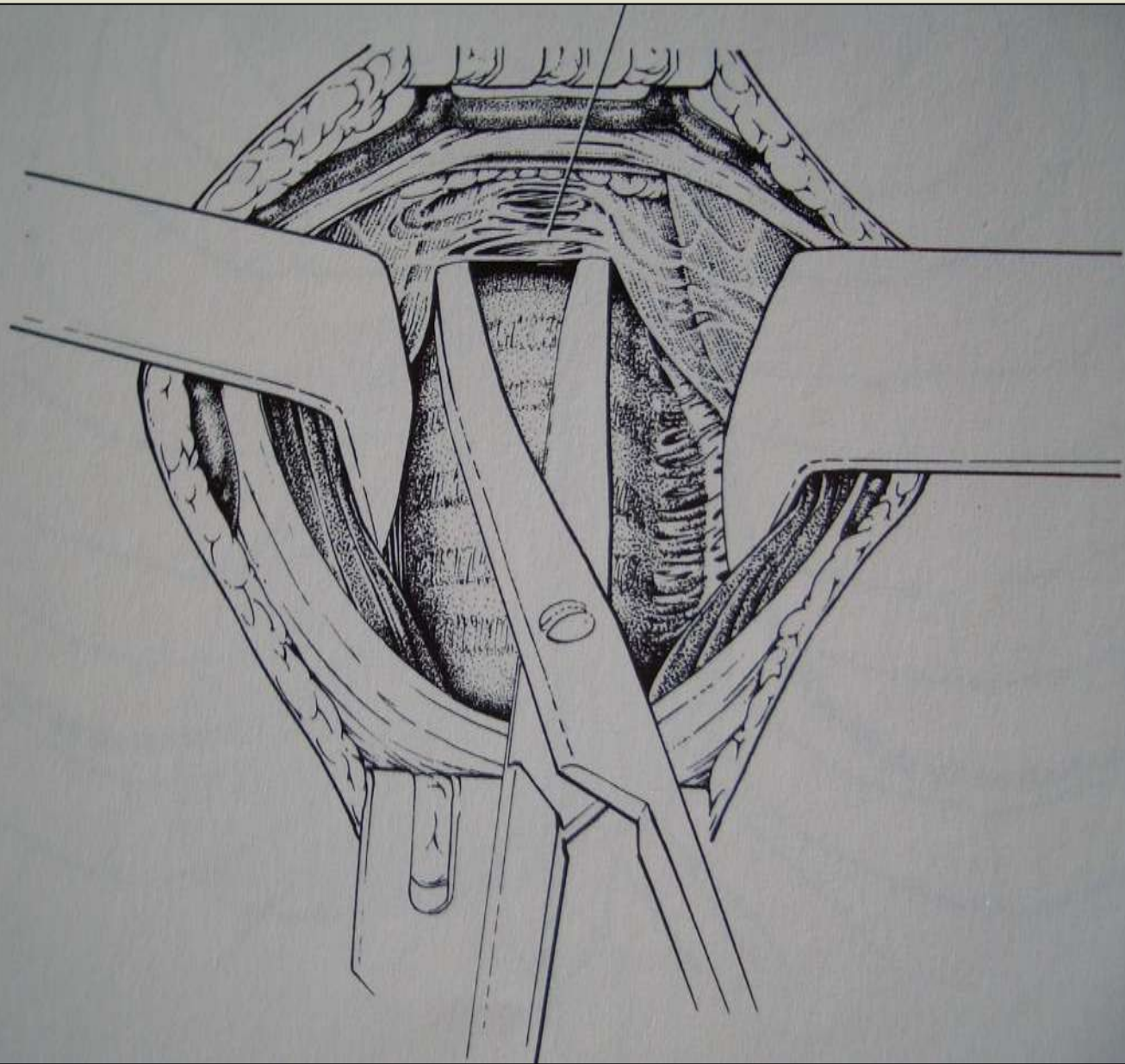


Mediastinoskopie Videomediastinoskopie

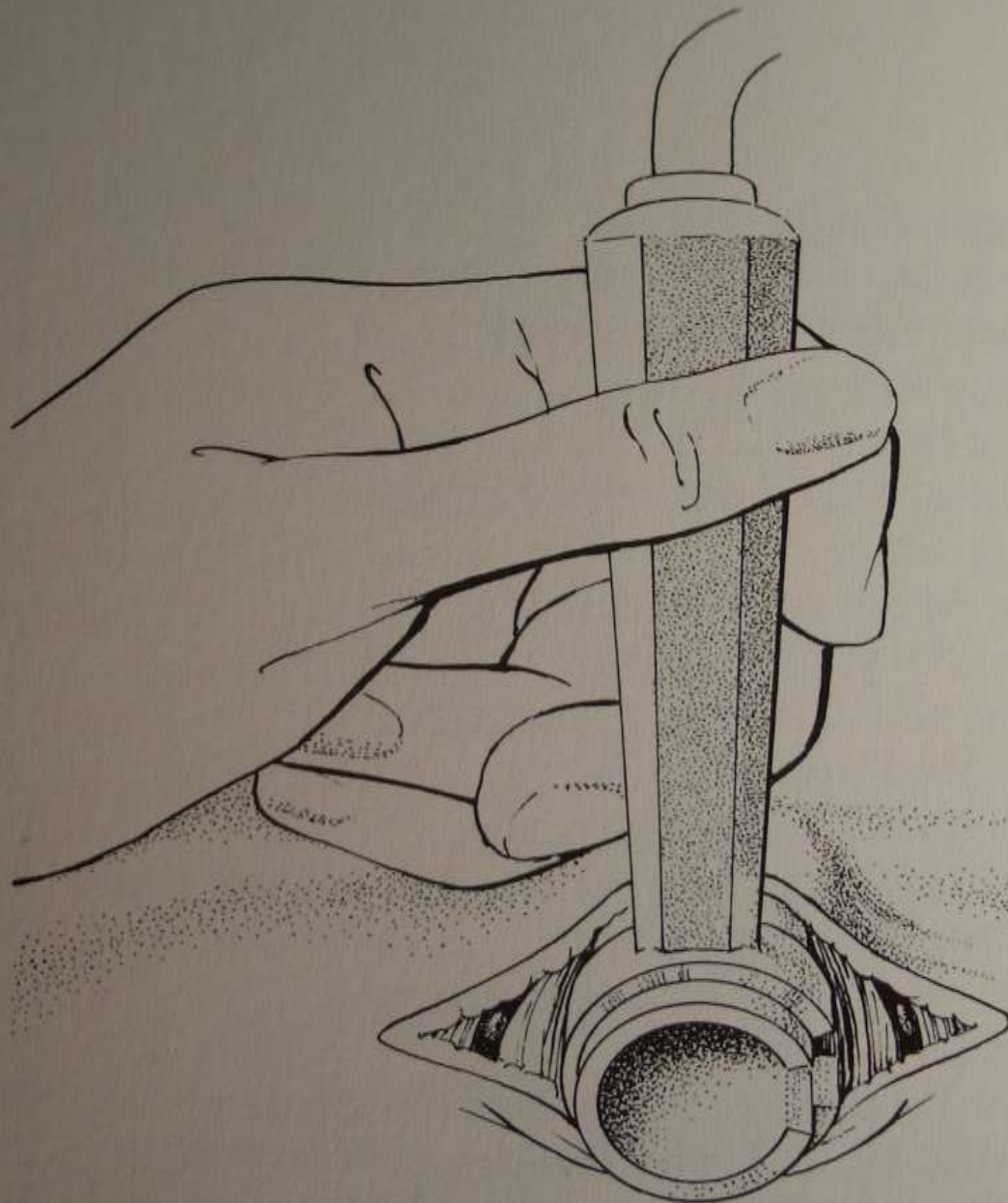
Carlens 1959

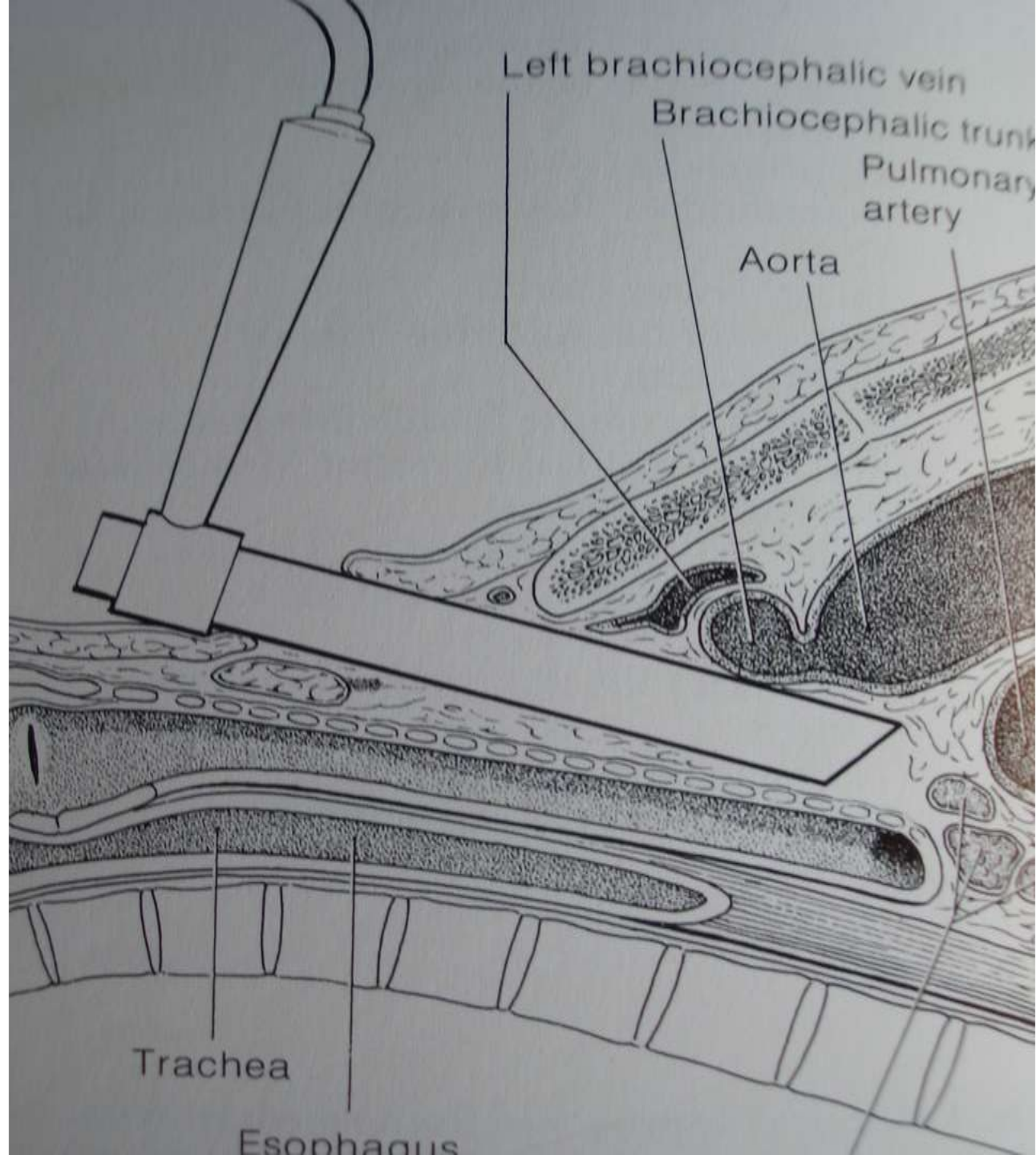


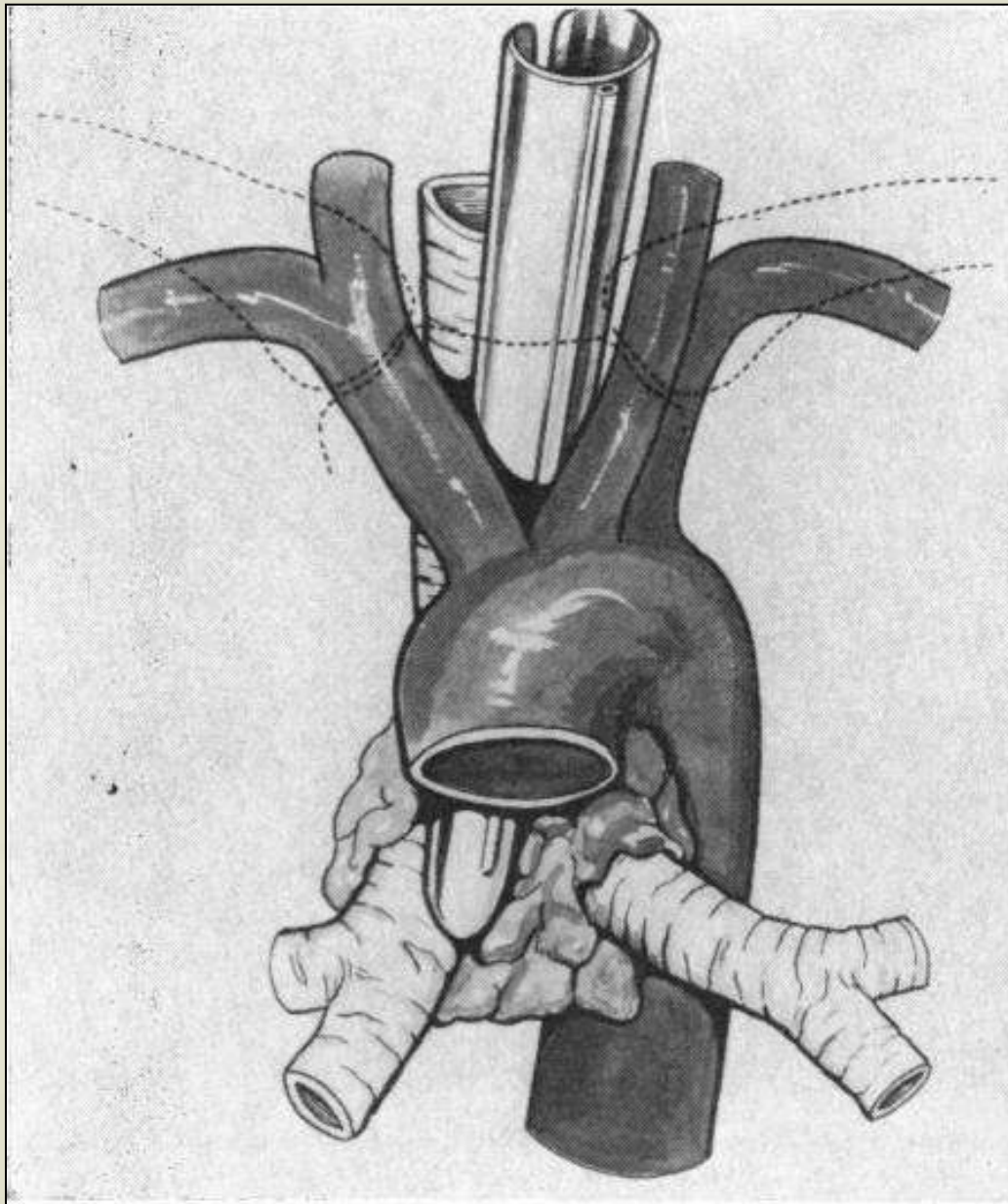




a



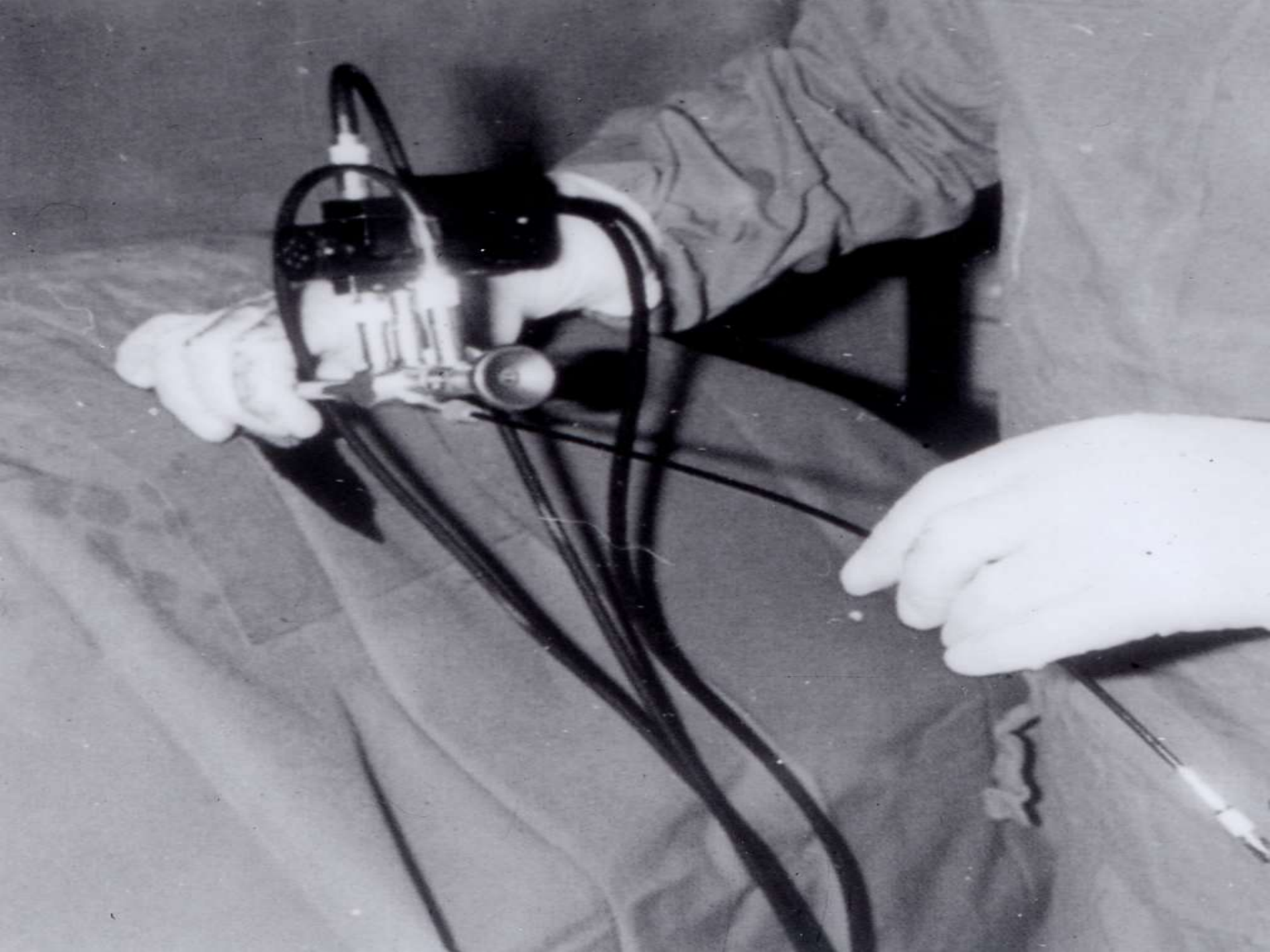




Torakoskopie Videotorakoskopie

Jacobaeus 1910

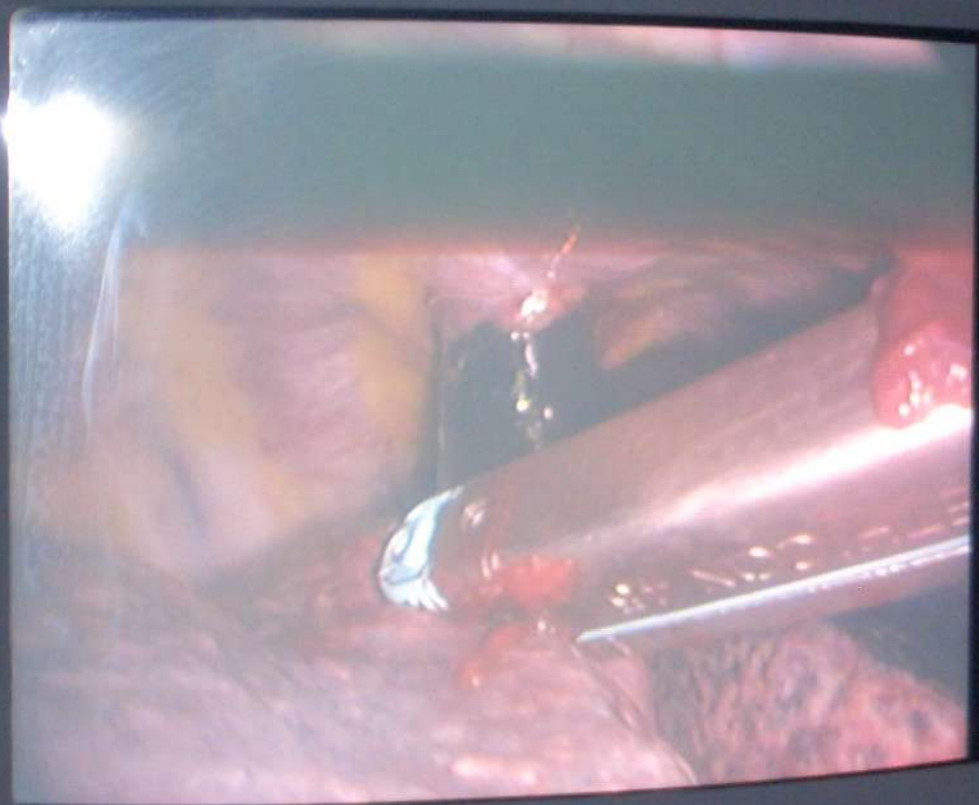








TRINITRON
Super fine pitch



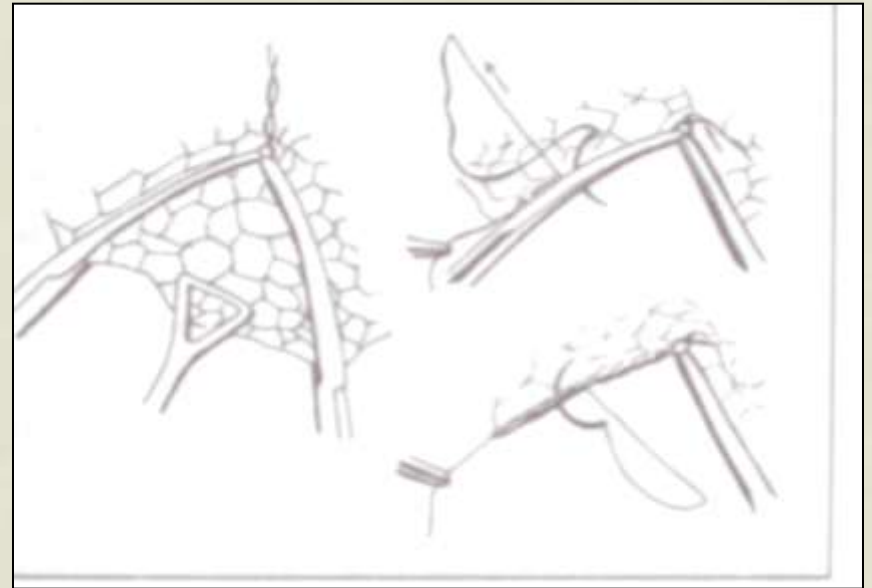
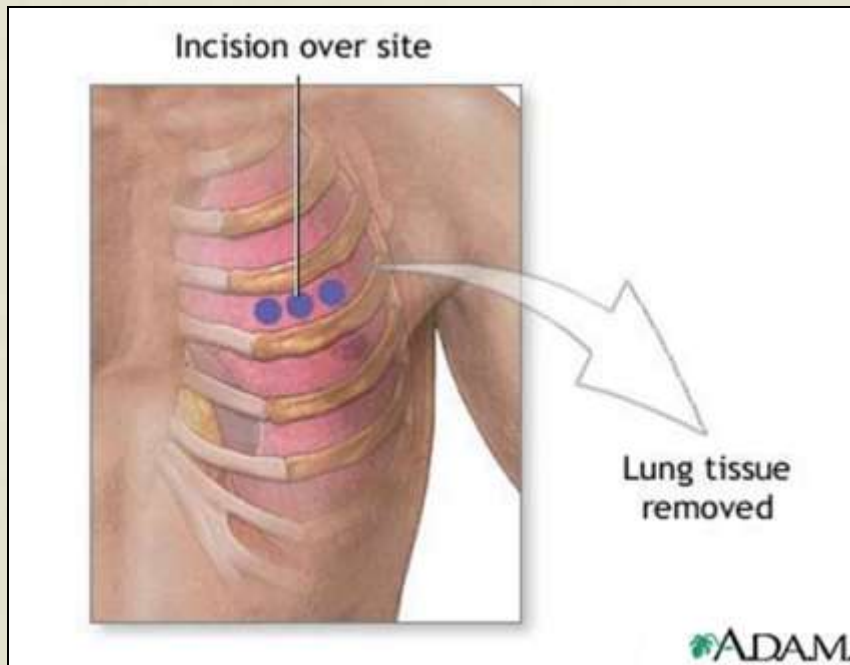
SONY

Control panel features:

- Input selection: PAL (red dot), SECAM, NTSC
- Blue Only: BLUE ONLY
- Under Scan: UNDER SCAN
- M-V Delay: M-V DELAY
- Analog/Digital: ANALOG / DIGITAL
- Ext Sync: EXT SYNC
- Reset: RESET
- Gain: GAIN (R, G, B)
- Aperture: APERTURE
- Bright: BRIGHT
- Chroma: CHROMA
- Phase: PHASE
- Contrast: CONTRAST
- VOL: VOL (VOLUME)
- Power: POWER (green button)

Chirurgická plicní biopsie

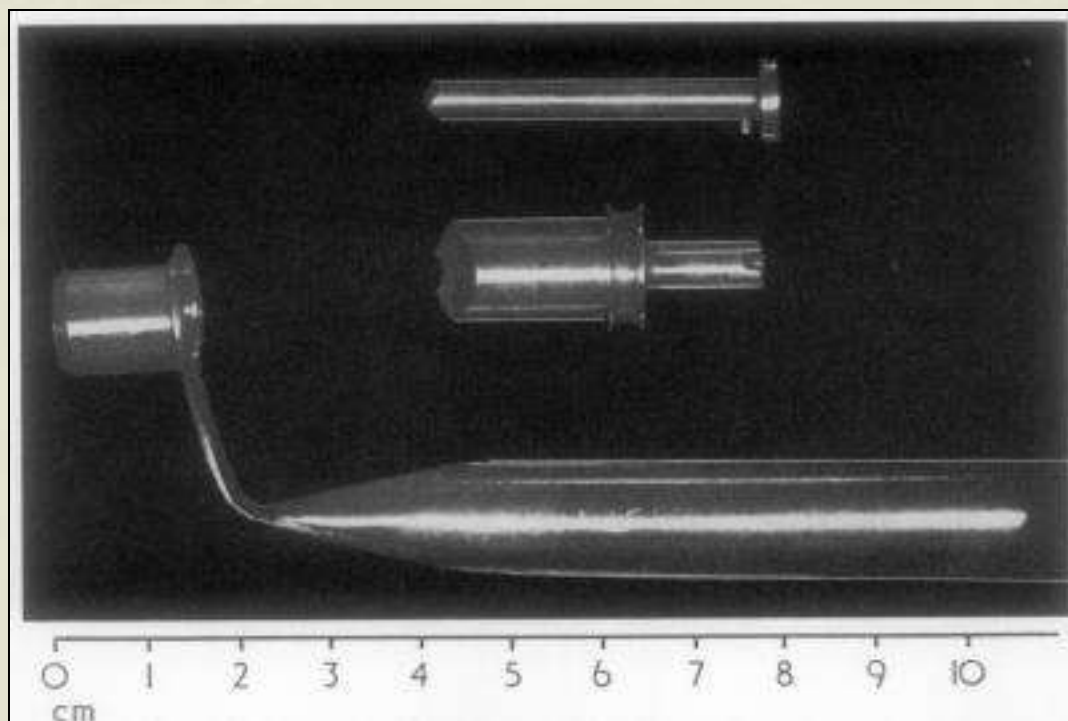
Klassen, Anlyan, Curtis 1949

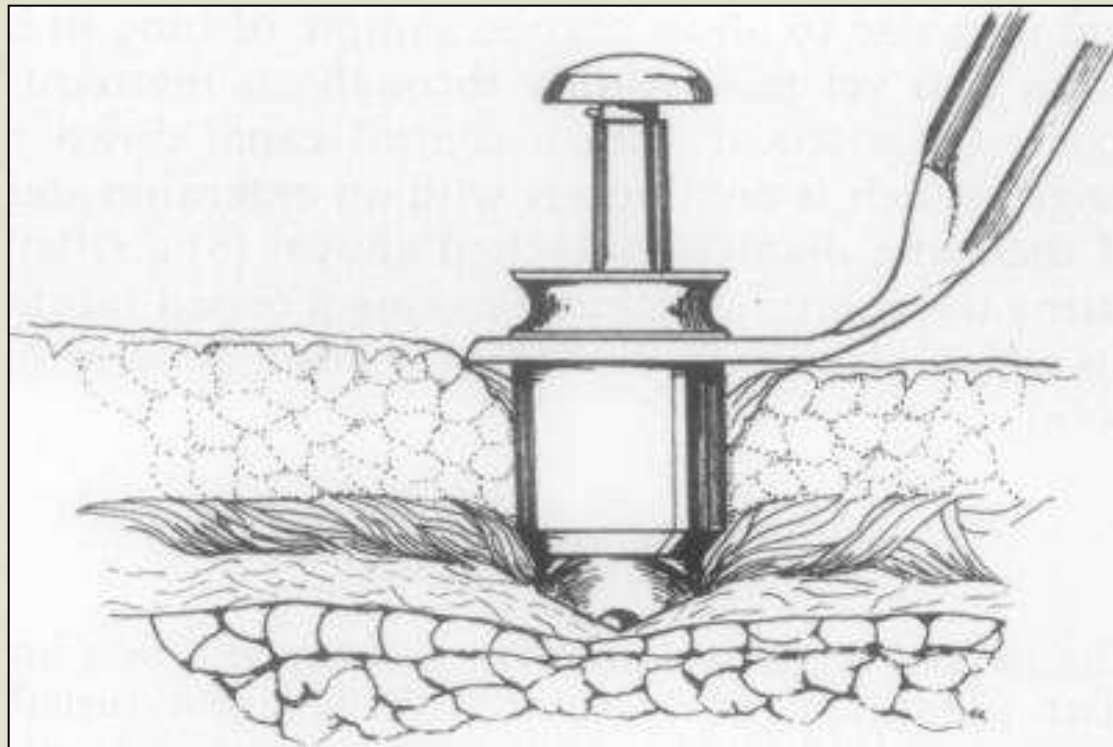


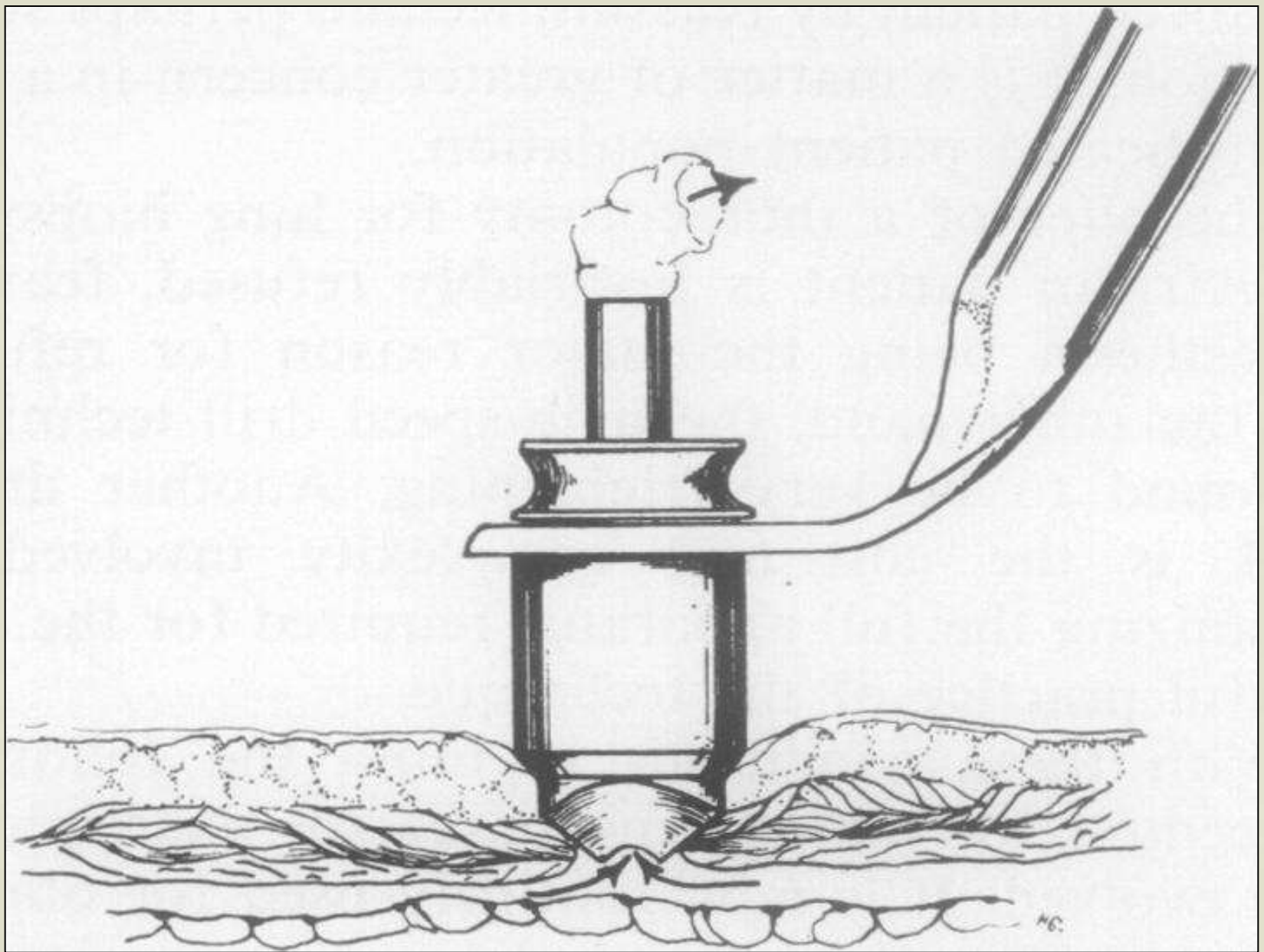
Plicní biopsie

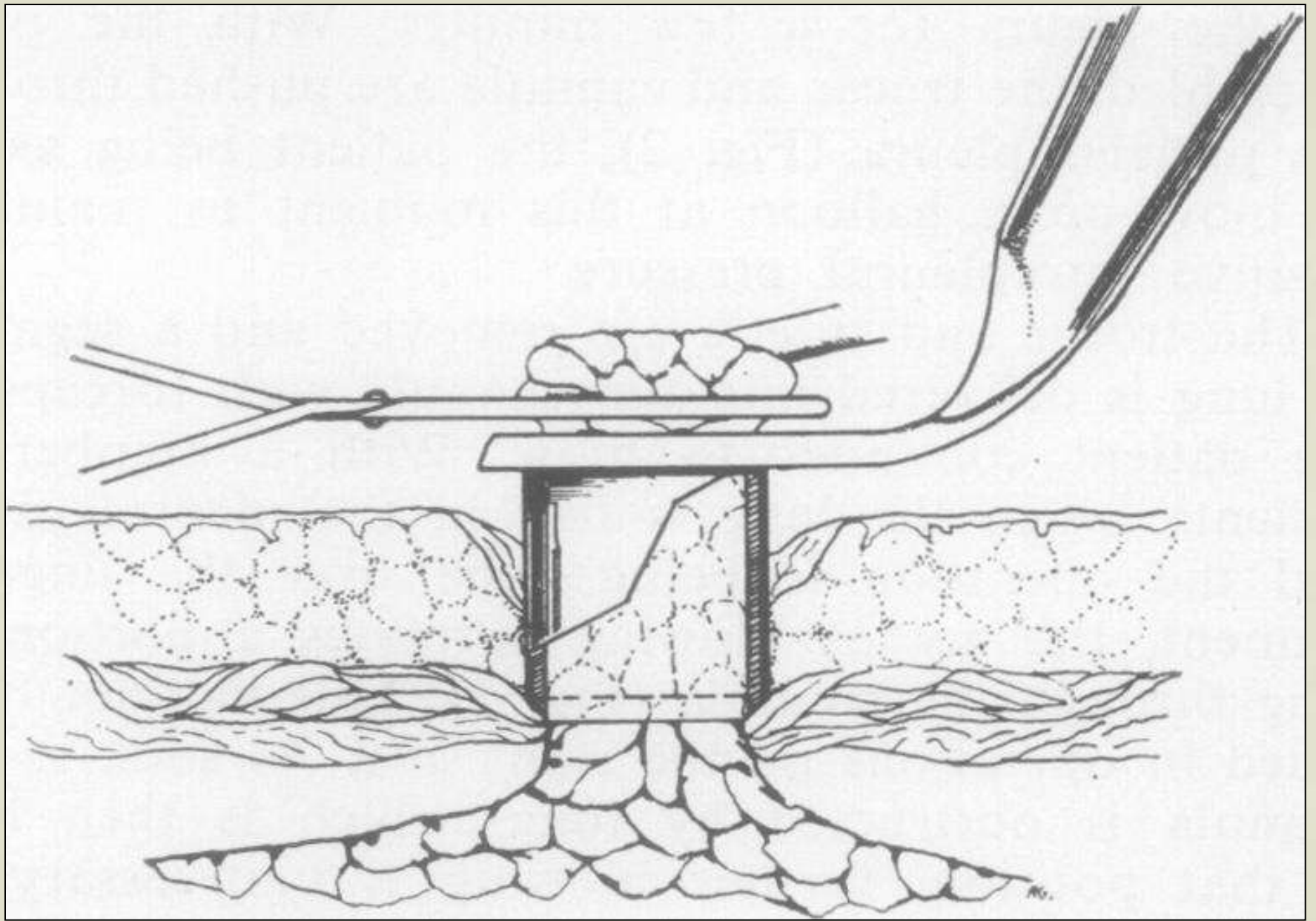
Massen 1972

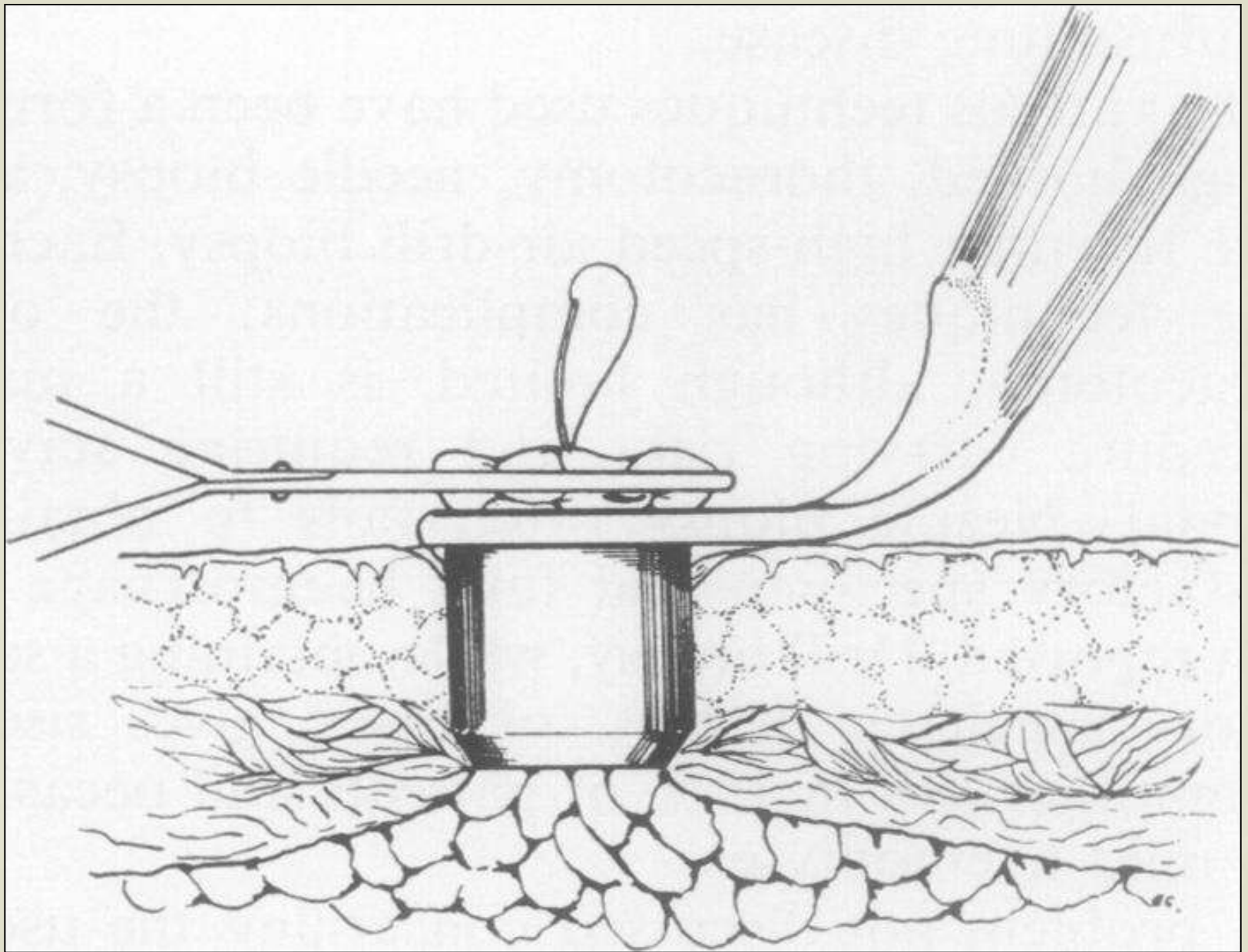
Thomas 1974





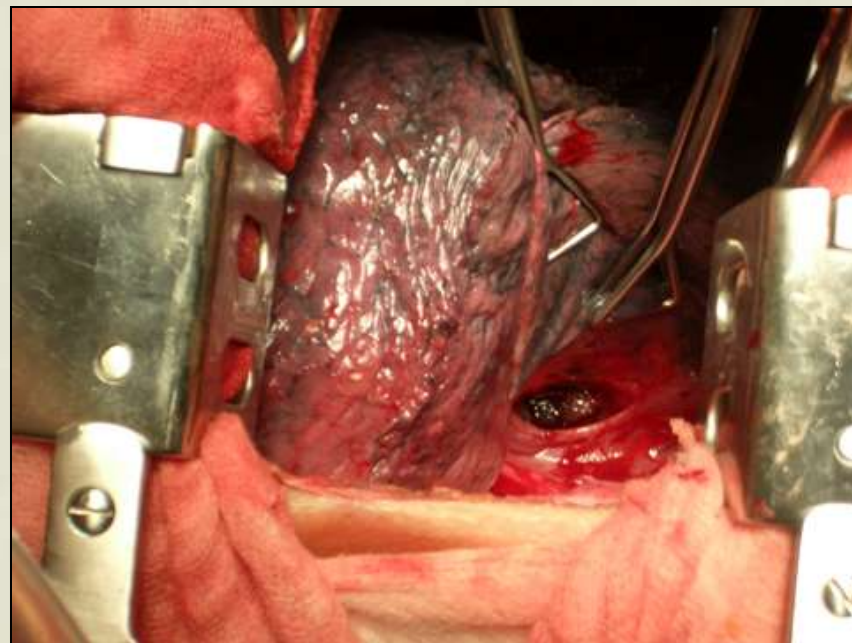
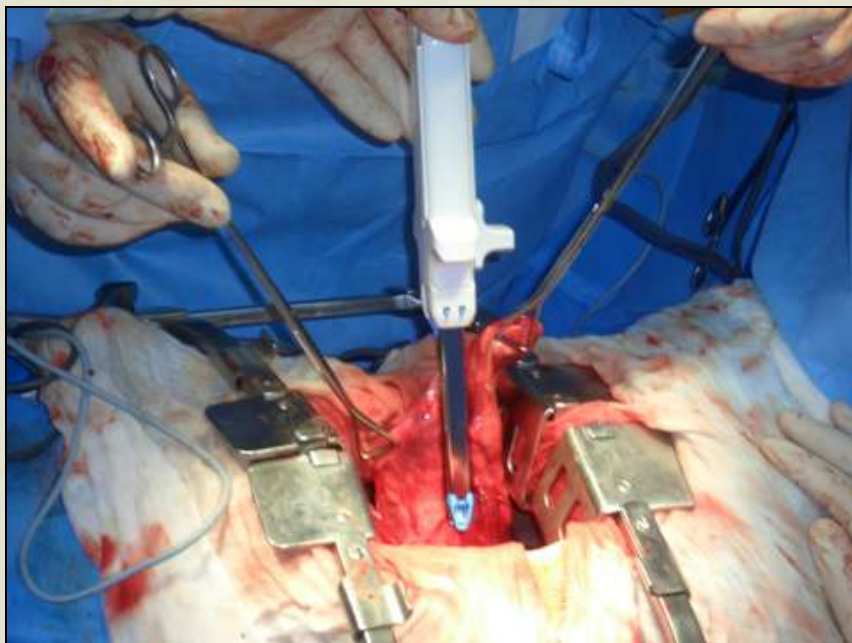






Torakotomie s peroperační biopsií

Diviš 1953 Procházka 1954 Polák 1959



Video-asistovaná torakoskopie

- 1. Torakoskopie
- 2. Plicní biopsie
- 3. Peroperační histologie



VATS- poloha



Oddělení řemesla od umění



VATS- minitorakotomie



VATS- minitorakotomie



VATS- minitorakotomie



VATS- minitorakotomie



VATS- rozvěrač



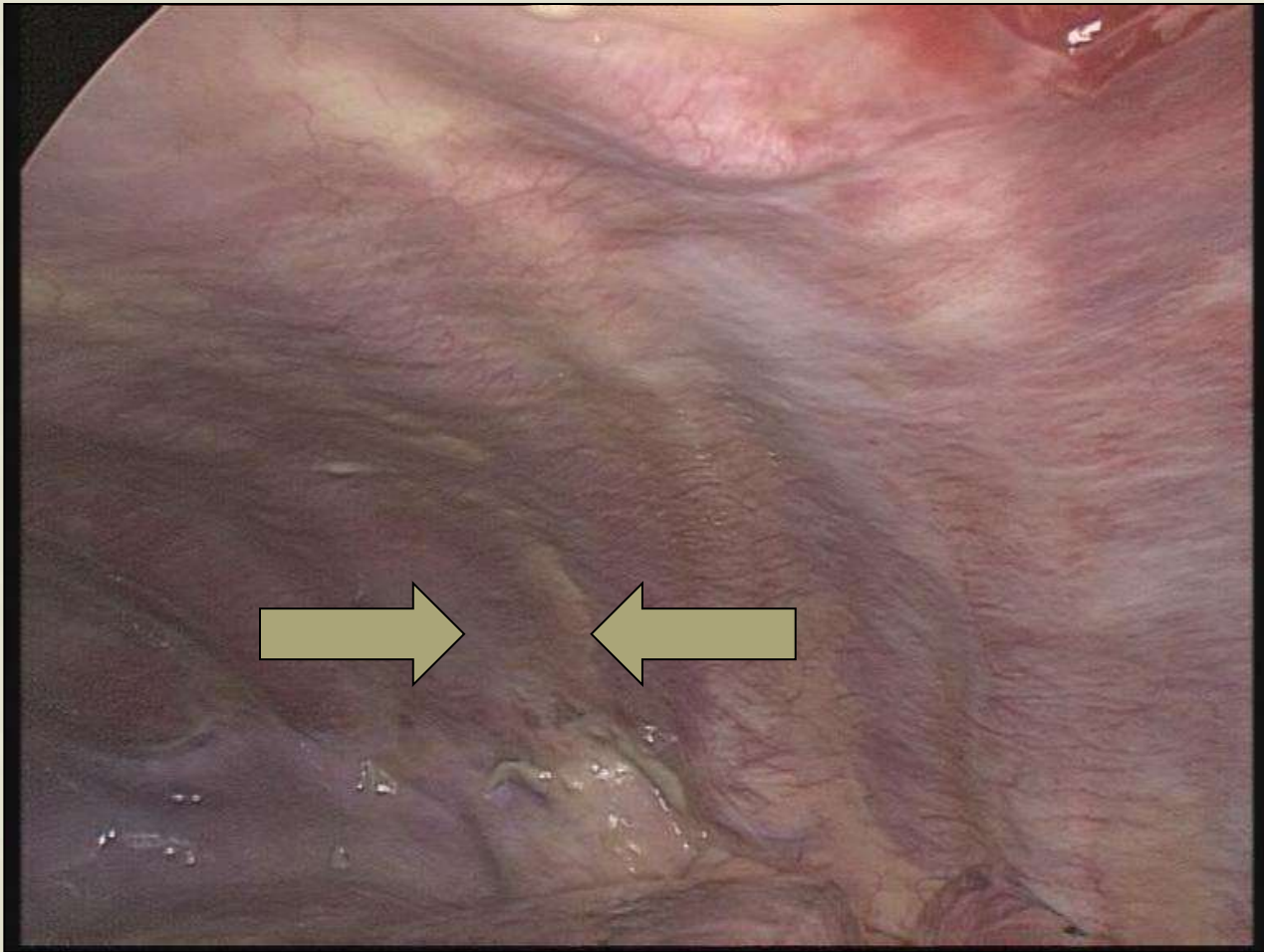
VATS- torakoskopie



VATS- port



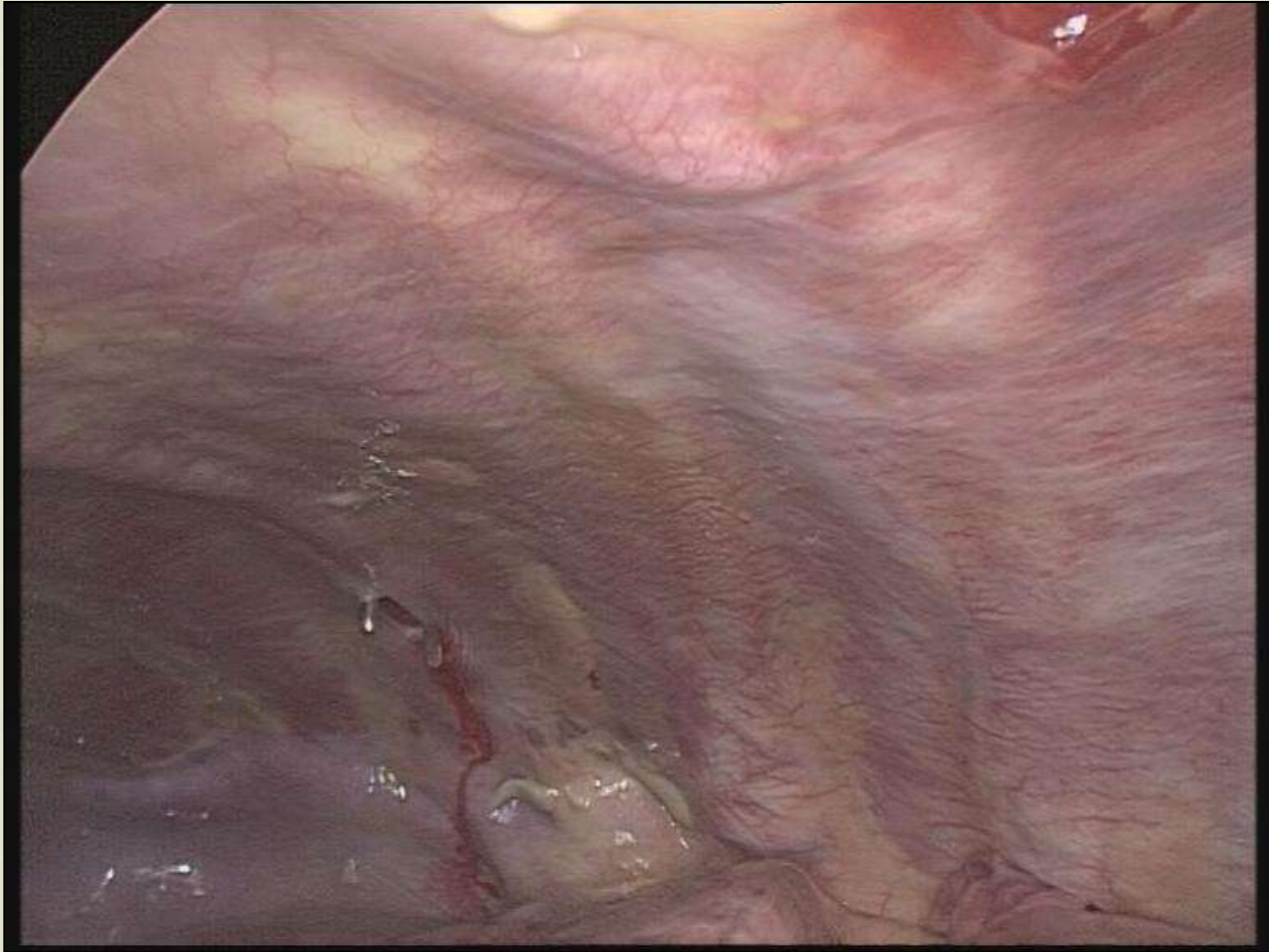
VATS port



VATS- port



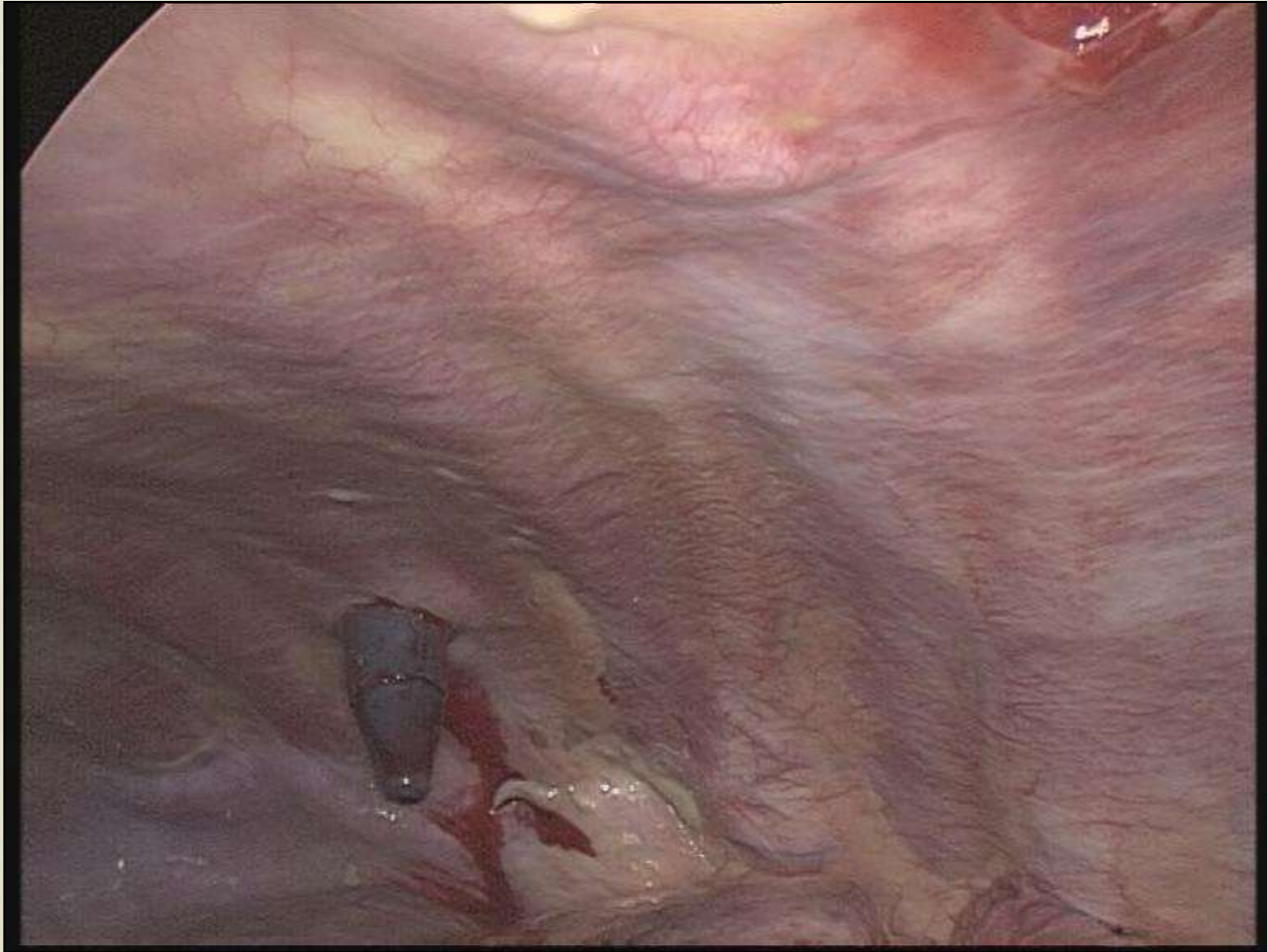
VATS port



VATS- port



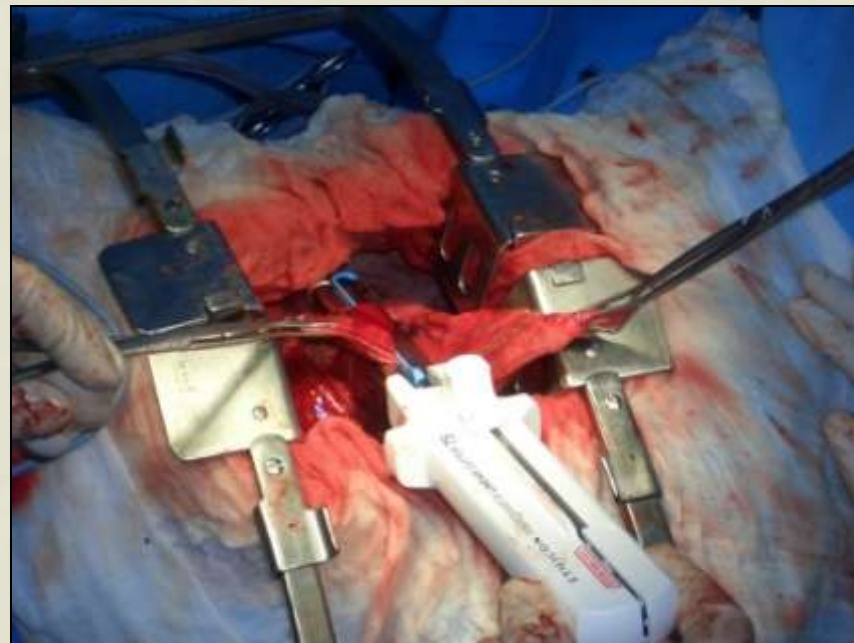
VATS port



VATS- kamera



VATS- atypická resekce



VATS- drenáž



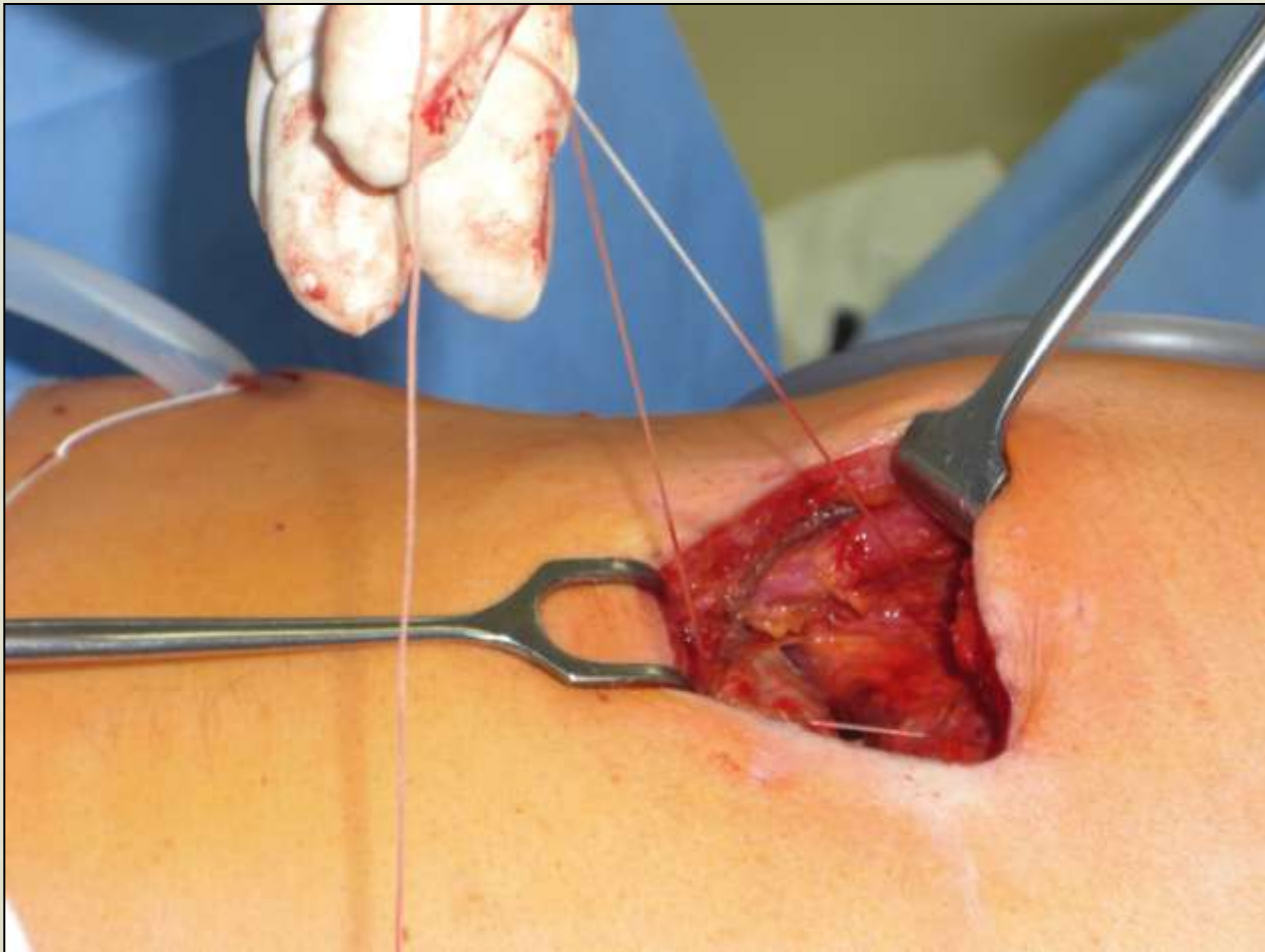
VATS- drenáž



Bülauova drenáž



VATS- sutura



VATS- sutura



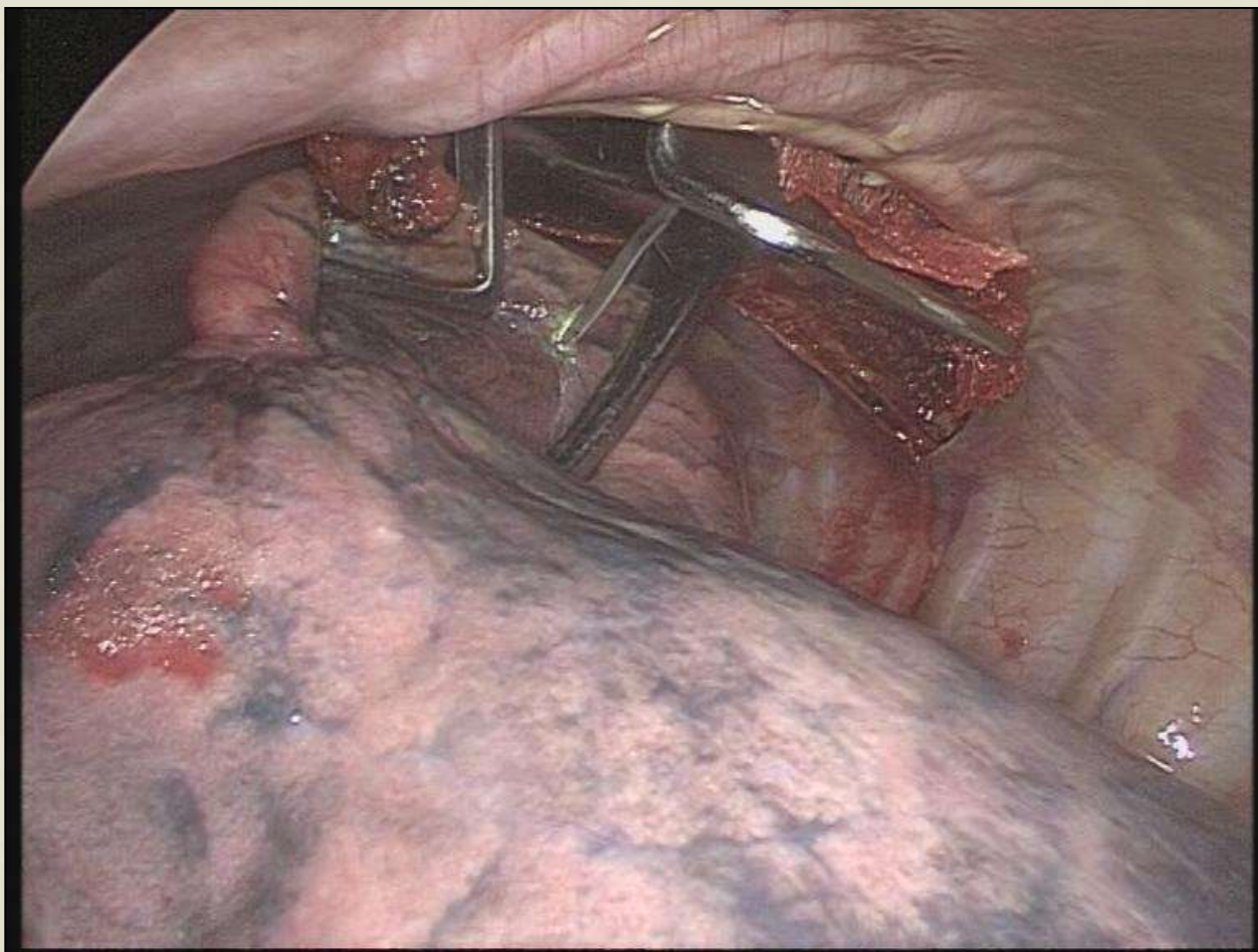
VATS- finish



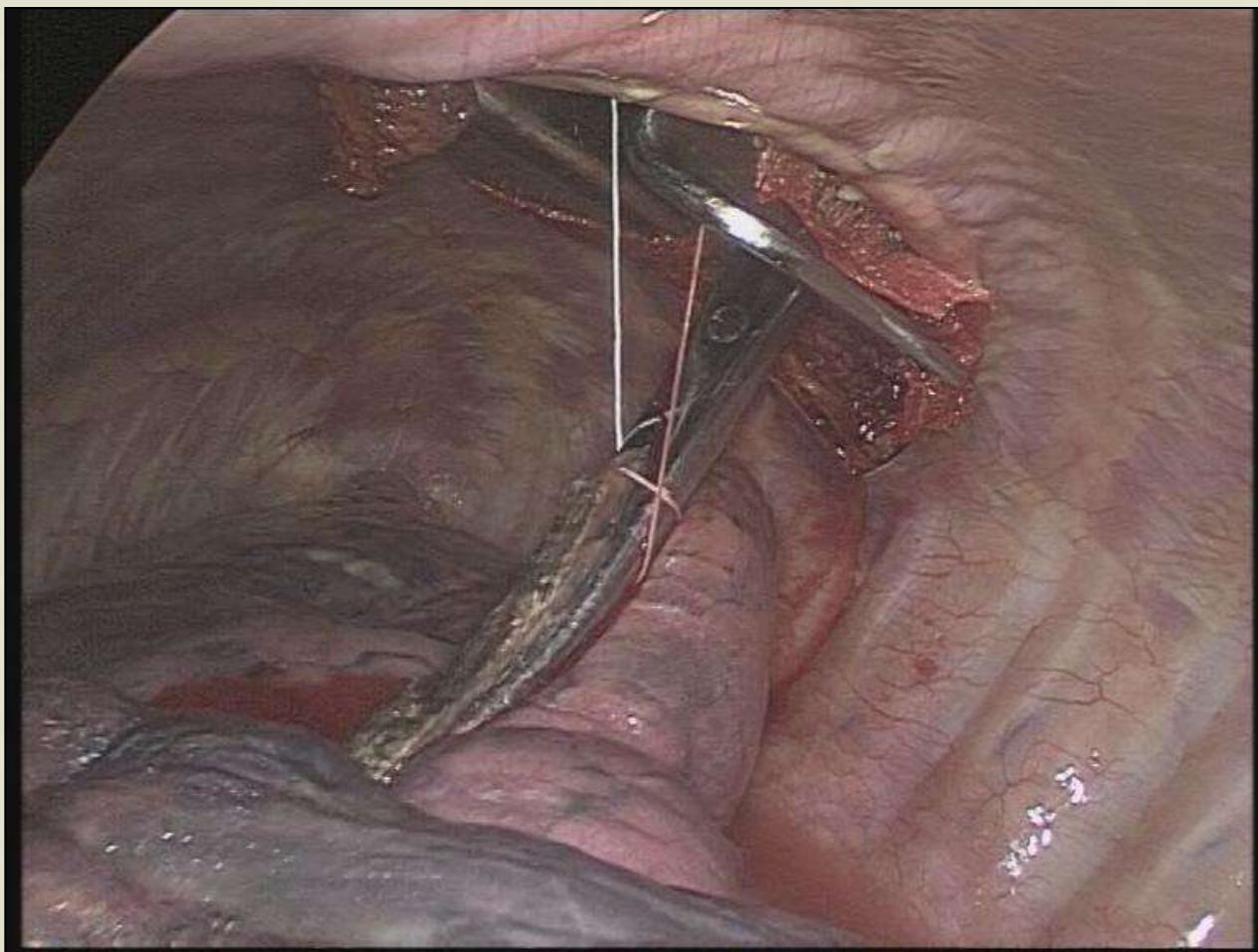
VATS palpance



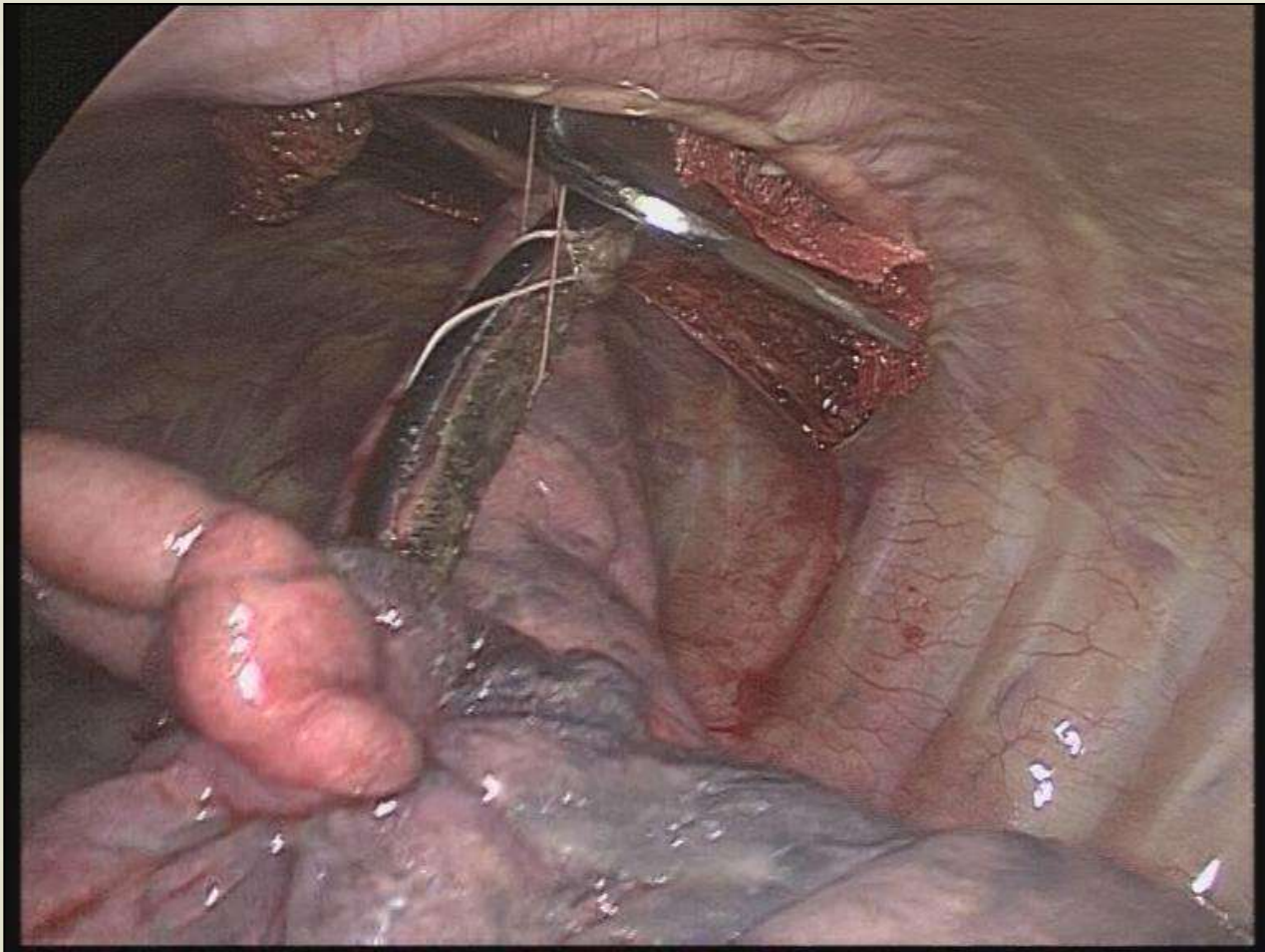
VATS atypická resekce



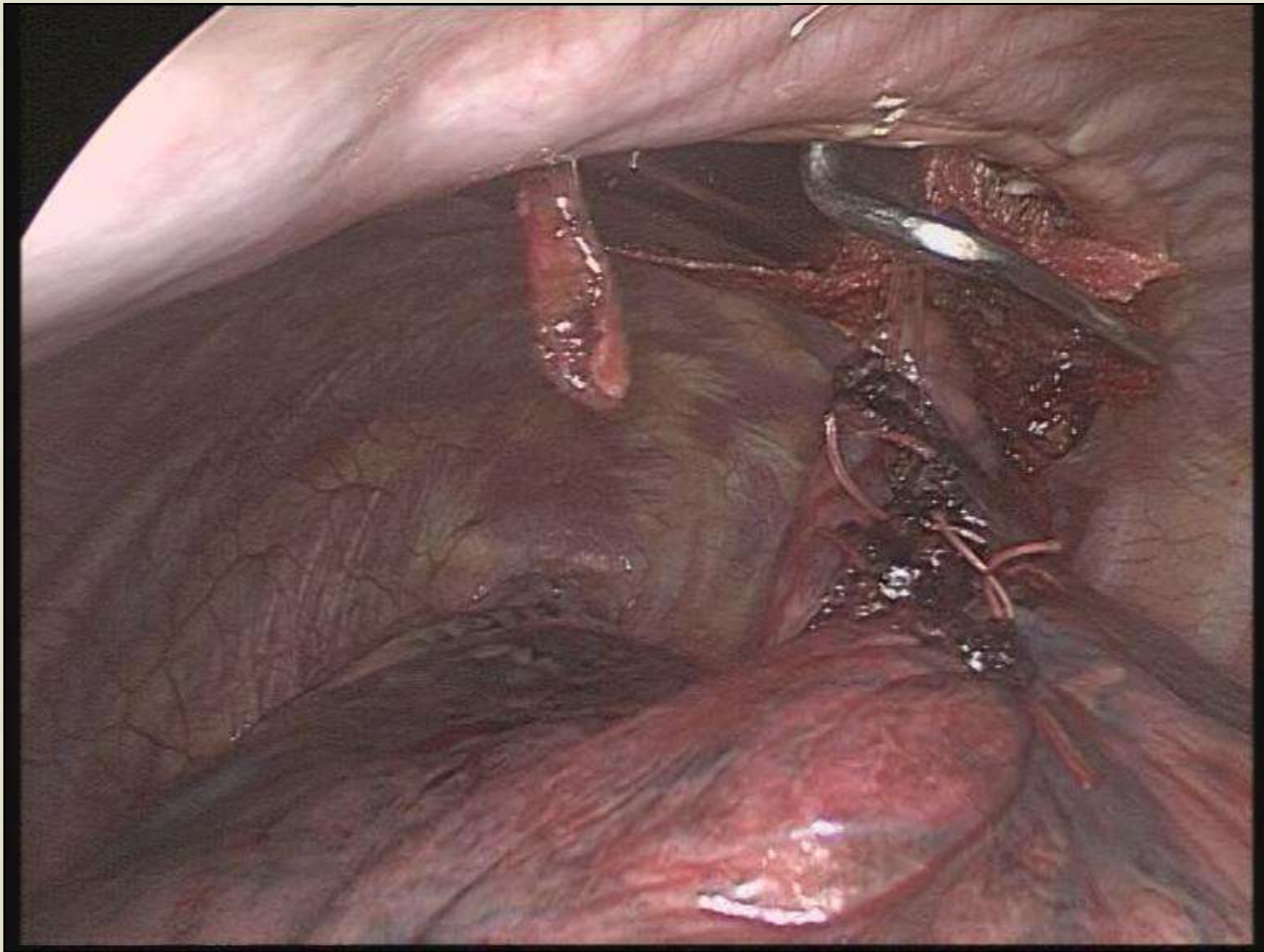
VATS atypická resekce



VATS atypická resekce



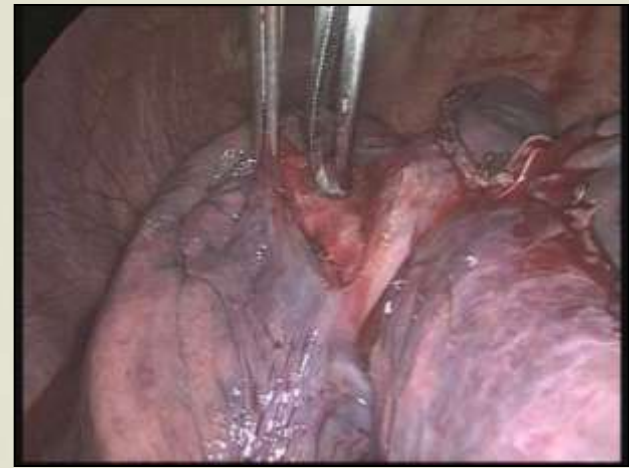
VATS atypická resekce sutura



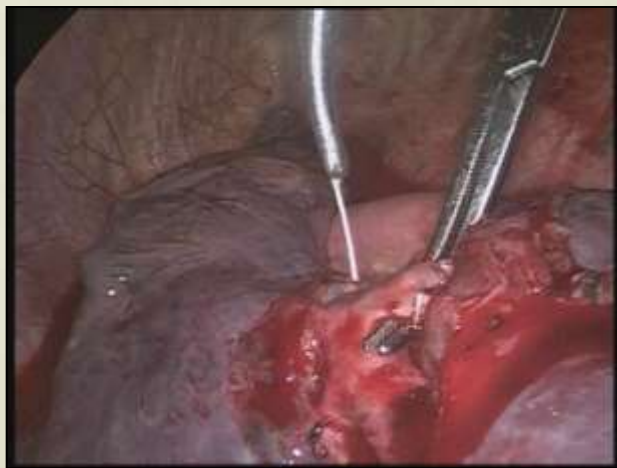
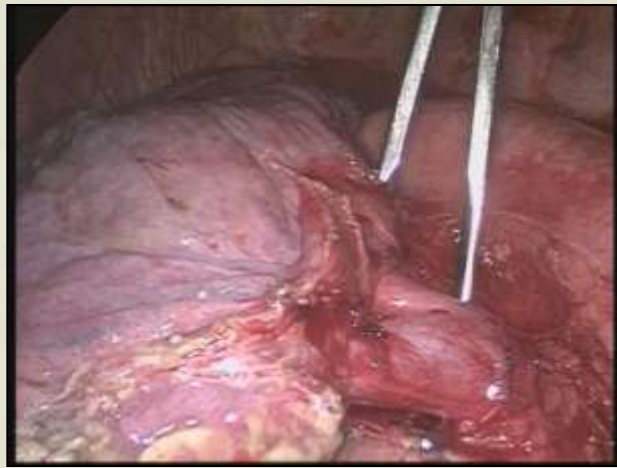
VATS atypická resekce kontrola



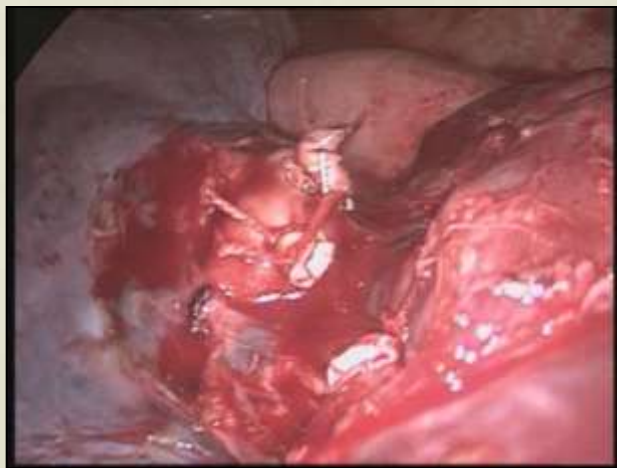
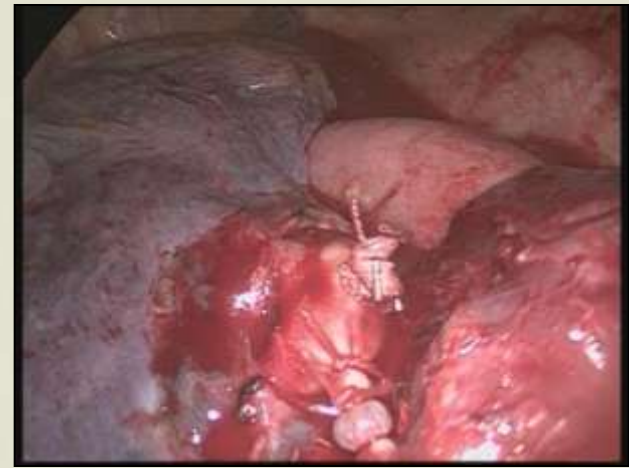
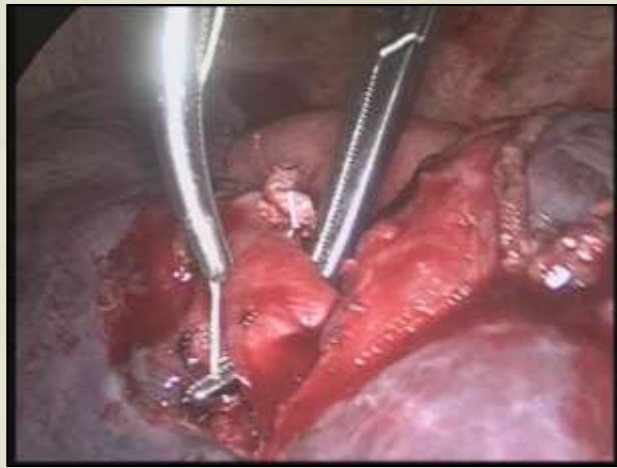
VATS dolní lobektomie vlevo



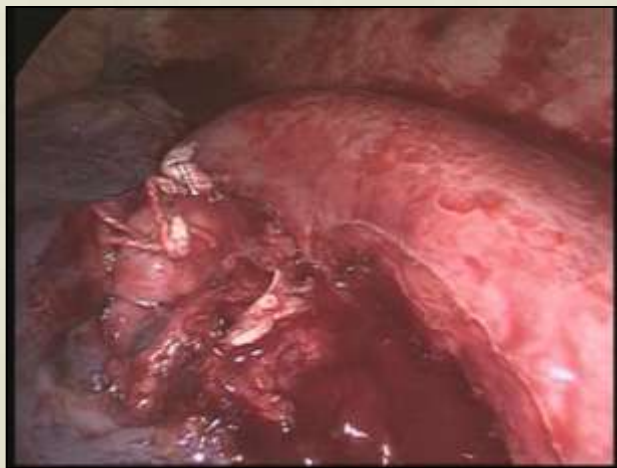
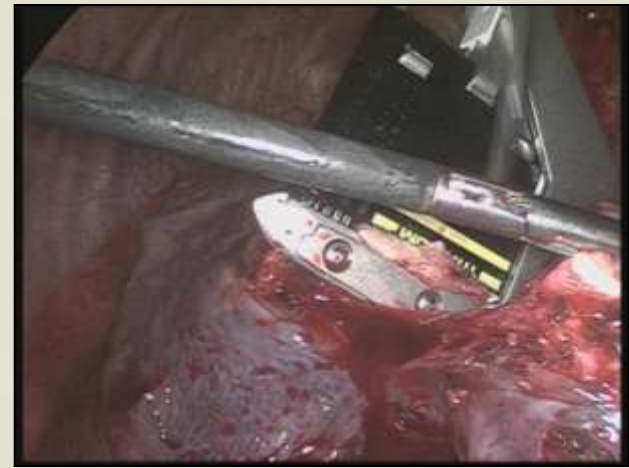
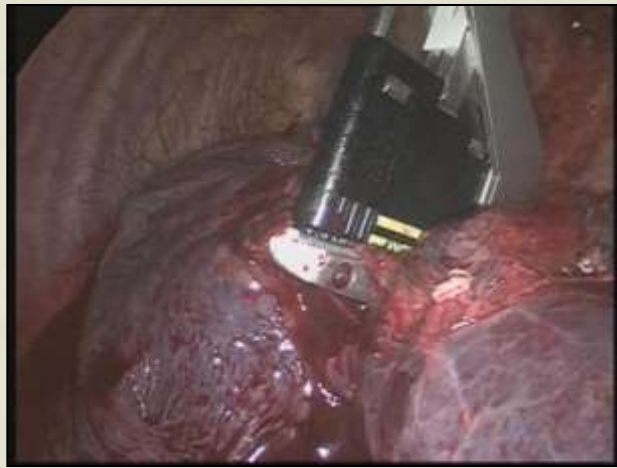
VATS dolní lobektomie vlevo



VATS dolní lobektomie vlevo



VATS dolní lobektomie vlevo



VATS dolní lobektomie vlevo



Děkuji za pozornost