



# Ma'ruza № 1.

**Kirish. klinik anatomiya (operativ xirurgiya va topografik anatomiya) fani haqida tushuncha.**

**Klinik anatomiya fanining tarixi.**

**Operativ jarrohlik va uning vazifalari.**

**Operatsiya turlari.**

**Odam anatomiyasi, operativ jarrohlik va topografik anatomiya kafedrasini.**

**Katta o'qituvchi**

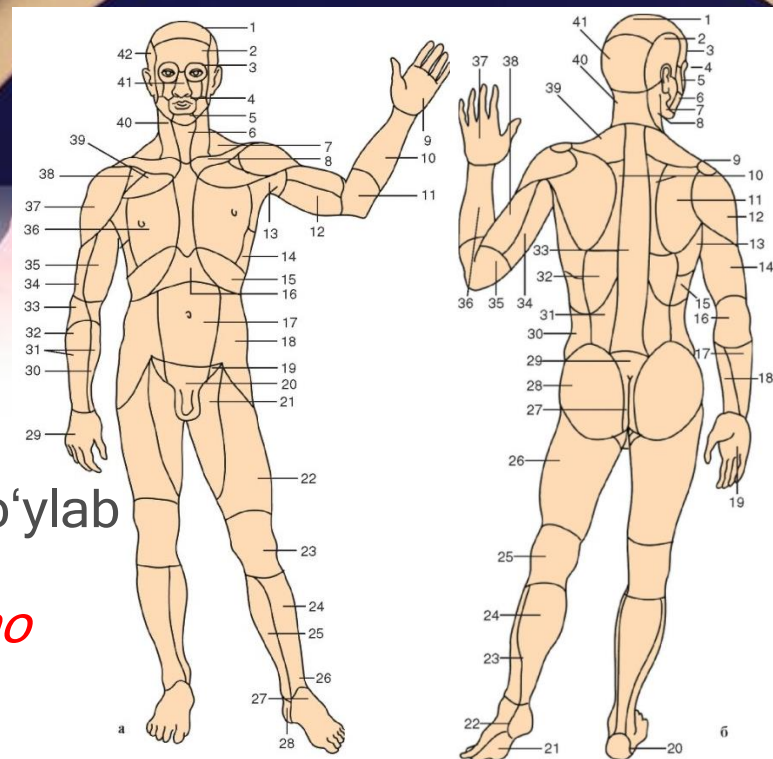
**Gulmanov Ilich Djumabaevich**



## Ma'ruza rejasi

1. Klinik anatomiya fanining asosiy tushunchalari.
2. Klinik anatomiya fani tarixi.
3. Klinik anatomiya fanini o'rganish usullari.
4. Topik tashxis haqida tushuncha.
5. Jarrohlik operaçiyalari turlari.
6. Operatsiya elementlari.
7. Og'riqsizlantirish usullari;
8. Jarrohlik asboblari.
9. Jarohatga birlamchi jarrohlik ishlov berish.

# Klinik anatomiya (topografik anatomiya) fanining asosiy tushunchalari.



Klinik (topografik) anatomiya - a'zo va to'qimalarning inson tanasidagi sohalar bo'ylab o'zaro joylashuvi va munosabati haqidagi ta'limotdir. U grekcha *topos* (joy) va *grapho* (yozaman) so'zlaridan kelib chiqqan.

Klinik anatomiya operativ jarrohlik bilan birga bir butun bo'lib, ikki yaxlit fanning yirik bo'limlaridir.

Klinik anatomiya amaliy fan bo'lib, klinikaning, ayniqsa jarrohlik klinikasining talablariga javob beradi.

Normal anatomiya inson tanasi tuzilishini a'zolar sistemalari bo'yicha, ya'ni analitik yo'l bilan o'rganadi.

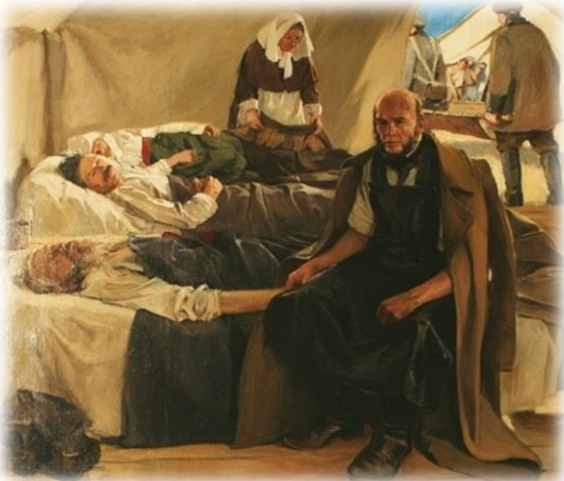
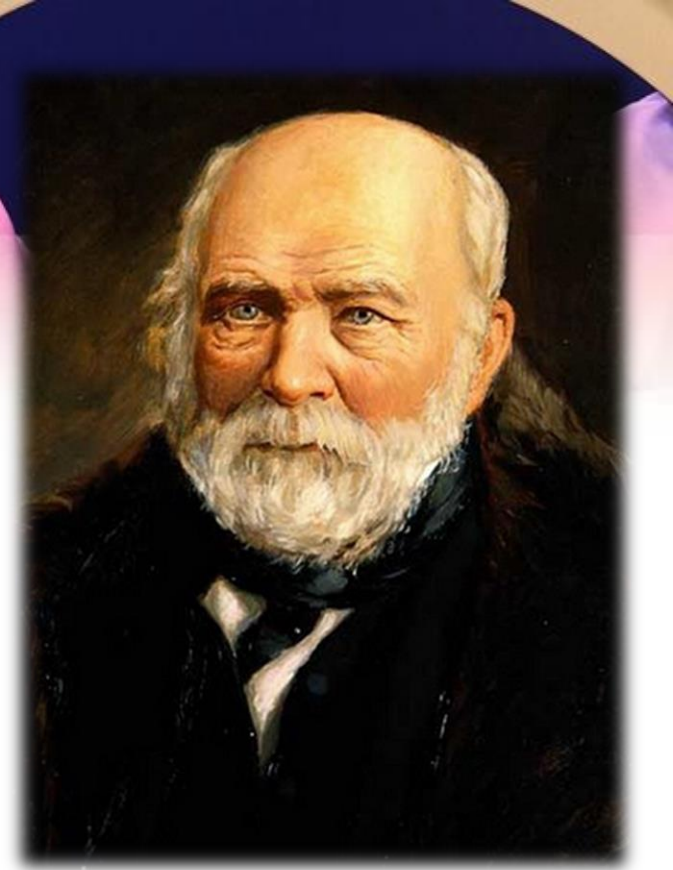
Klinik anatomiya esa bu alohida qismlarni birlashtirib, ulardan mazkur sohaning yaxlit tasvirini tuzadi.

## N. I. Pirogov - topografik anatomiyaning asoschisi

1837 y. - **“Arterial poyalar va fassiyalarning jarrohlik anatomiyasi”** asari.

Sankt-Peterburgdagi tibbiy-xirurgik akademiyada anatomik institut tashkil etib (1846), unda amaliy, tasviriy va topografik anatomiyani birlashtirdi.

1843-1848 yy. N.I. Pirogov yangi fan - topografik anatomiyani **«Inson tanasi anatomiyasi to‘liq kursi, tasviriy-fiziologik va jarrohlik anatomiyasi»** asarida shakllantirgan.

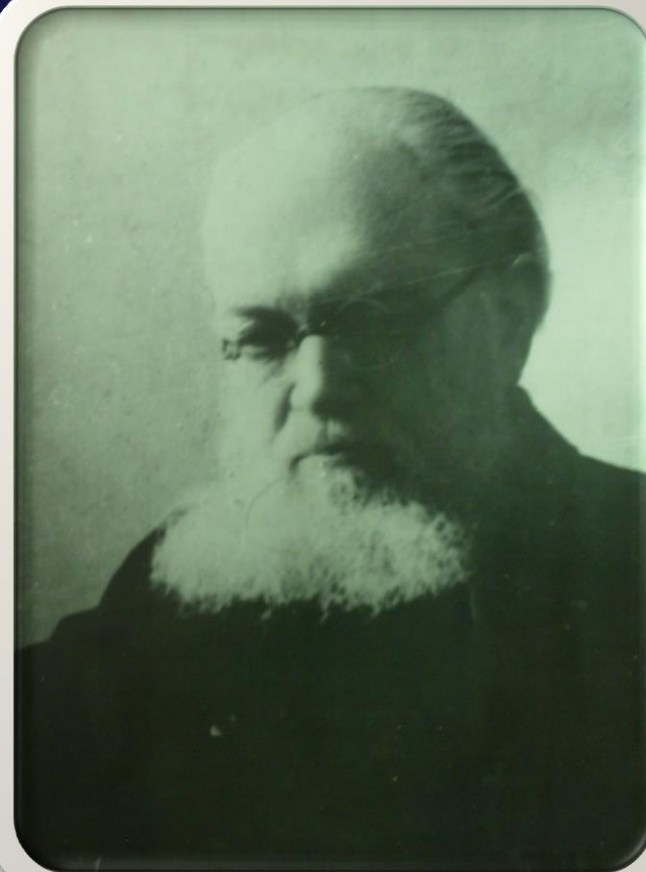


N.I. Pirogov fanni tadqiq etishning yangi uslublarini ishlab chiqdi va tatbiq etdi: muzlatilgan murdalarni uchta tekislik bo‘ylab arralab kesish (**Pirogov kesmalari**), “muz haykaltaroshligi”, murdada tajriba qilish kabi usullar **«Muzlatilgan inson tanasi bo‘ylab uch yo‘nalishda o‘tkazilgan kesmalarning illüstratsiyalangan topografik anatomiyasi»** asarida bayon etilgan (1851-1859 yy.).

Operativ jarrohlik va topografik  
anatomiya kafedrasini mudirlari

1920-1923 yy. Professor  
**Valentin Feliksovich  
Voyno-Yasenetskiy.**

“Yiringli jarrohlik ocherklari”  
asari davlat mukofatiga  
sazovor bo‘lgan.



Operativ jarrohlik va topografik  
anatomiya kafedrasini mudirlari

1923-1925 yy.

Dotsent **Georgiy  
Aleksandrovich**

**Ilin.**

Jarroh.

To'g'ri ichak xirurgiyasi.



Operativ jarrohlik va topografik  
anatomiya kafedrası mudirlari

1925-1929 yy.

Professor **F. I. Valker.**

V. N. Shevkunenko shogirdi.

Jarroh.

Bolalar xirurgiyasi.



Operativ jarrohlik va topografik  
anatomiya kafedrası mudirlari

1929-1930 yy.

Professor **Nikolay Semenovich  
Pereshivkin.**

Jarroh.

Abdominal xirurgiya.



Operativ jarrohlik va topografik  
anatomiya kafedrasini mudirlari

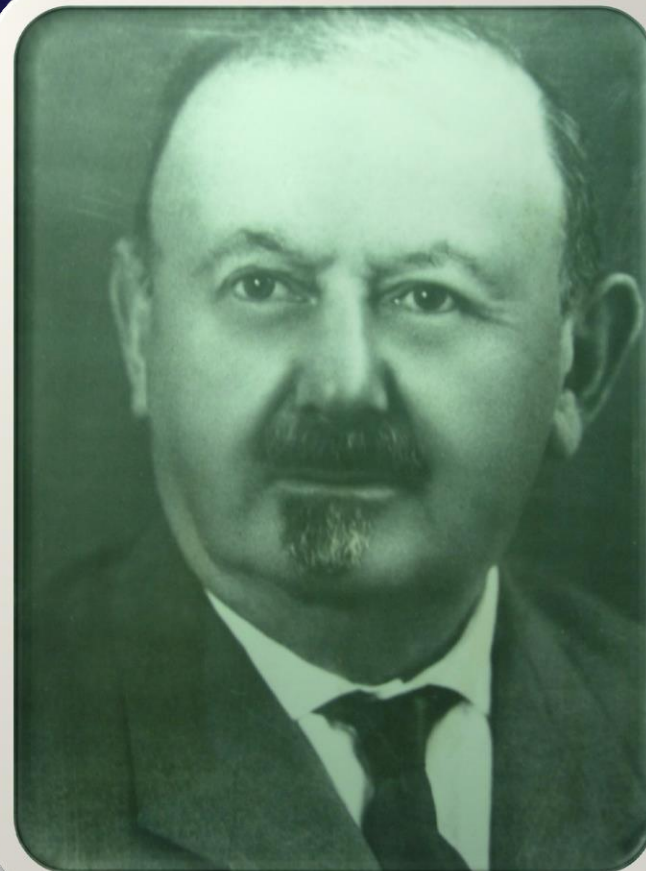
1931-1941 yy. va 1945-1966  
yy.

**Professor Boris Abramovich  
Stekolnikov.**

Jarroh.

V.F.Voyno-Yasenetskiy  
shogirdi.

Abdominal va torakal  
xirurgiya.



Operativ jarrohlik va topografik  
anatomiya kafedrası mudirlari

1941-1942 yy va 1944 -1945  
yy.

Dotsent

**Zinaida Dmitrievna  
Semenixina.**

Jarroh.



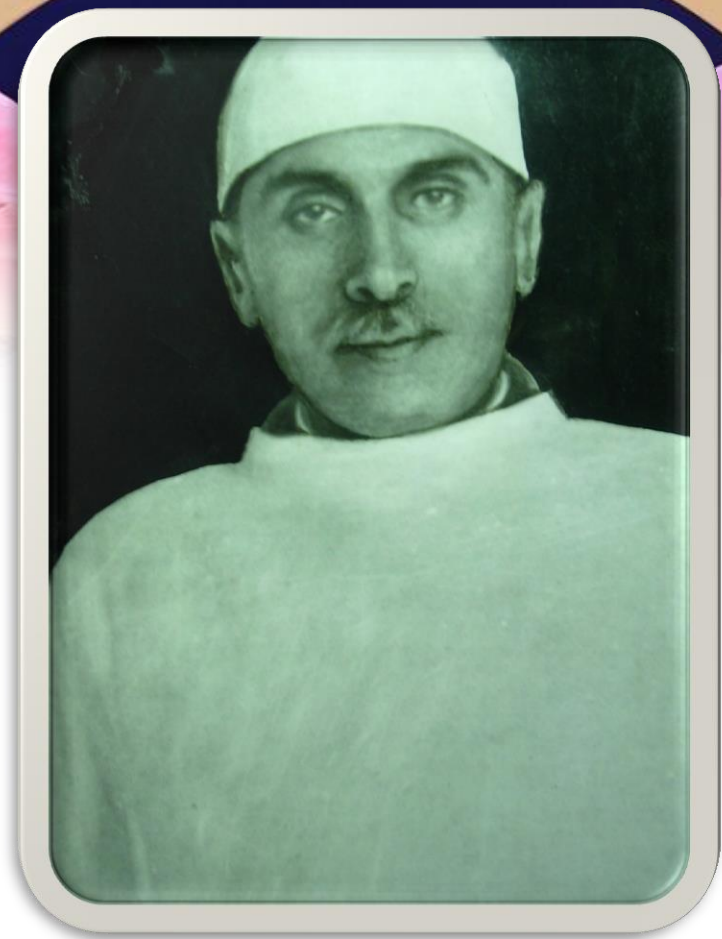
Operativ jarrohlik va topografik  
anatomya kafedrasini mudirlari

1942 -1944 yy.

Professor

**Safron Terent'evich Novitskiy.**

Jarroh.



Operativ jarrohlik va topografik  
anatomiya kafedrasini mudirlari

1966-1979 yy.

Professor

**Fozil Fayziraxmanovich  
Amirov.**

“Kekirdak va bronxlar  
plastikasi” ishi uchun davlat  
mukofoti sovrindori.

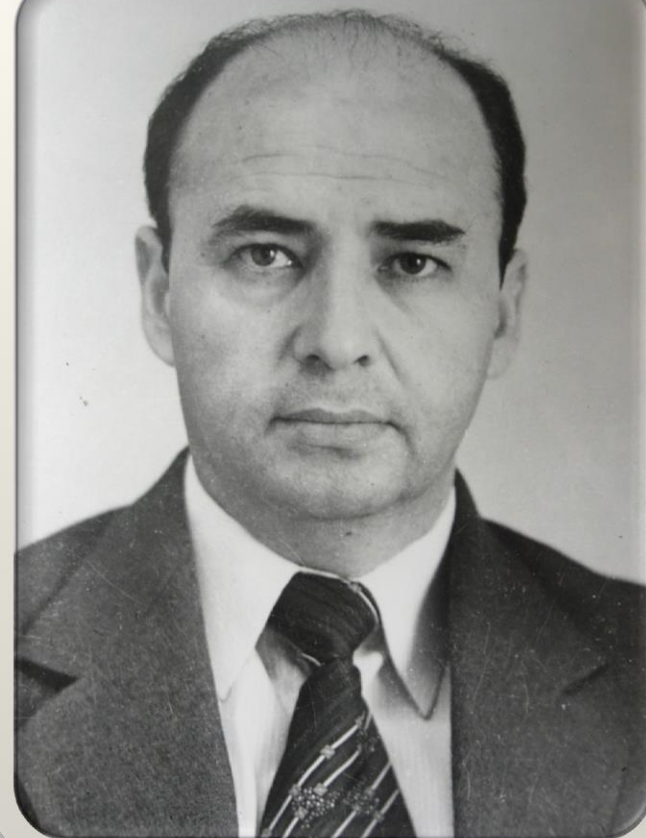


Operativ jarrohlik va topografik  
anatomiya kafedrasini mudirlari

1979-2005 yy.

Professor **Najiyo'lla  
Habibullaevich Shomirzaev.**

Akademik K. A. Zufarov va F.  
F. Amirov shogirdi, 1986-1990  
yillari ToshDavTI rektori.



Operativ jarrohlik va topografik  
anatomiya kafedrası mudirlari

2005-2017 yy.

Professor

Mirsharapov Utkir  
Mirsharapovich

Professor

Sagatov Tulagan Agzamovich.



Operativ jarrohlik va topografik  
anatomiya kafedrasini mudirlari

2017 yildan hozirgi kungacha.

Professor

**Usmonov Ravshan  
Jahongirovich.**

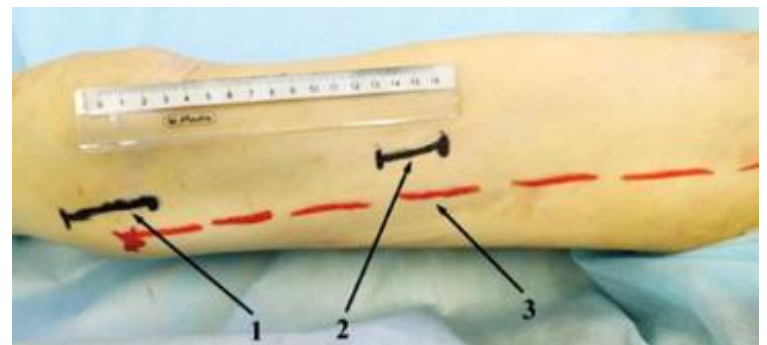
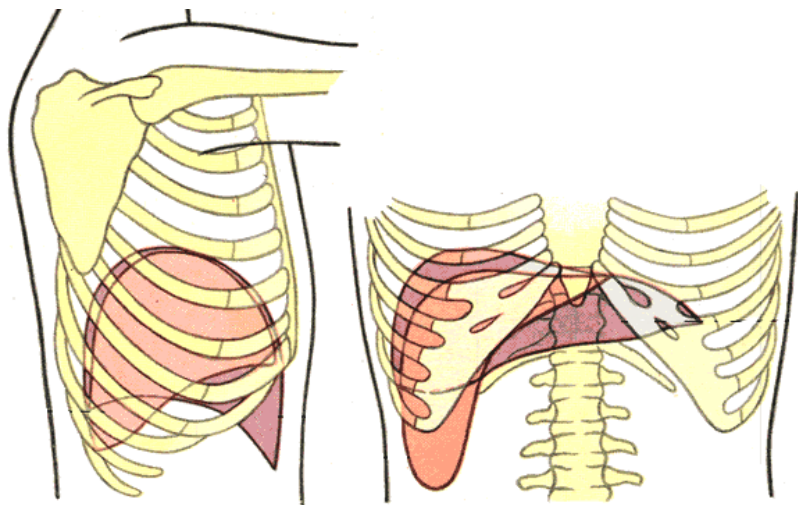
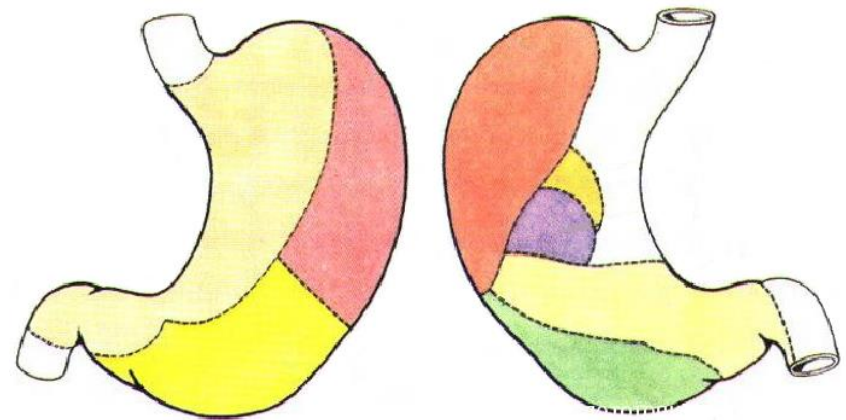
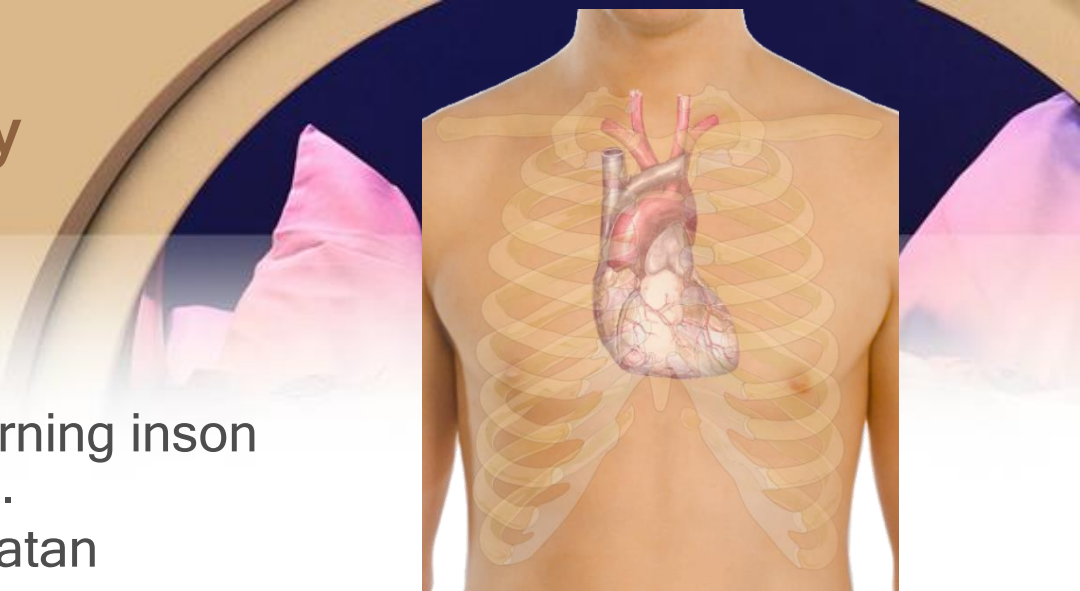
Professor N.H. Shomirzaev  
shogirdi.

2005-2017 yillari TTA  
prorektori.



# Klinik anatomiyaning asosiy tushunchalari

- **Golotopiya** - a'zo va tuzilmalarning inson tanasi sohalaridagi aks tasviri.
- **Skeletotopiya** - skeletga nisbatan joylashishi.
- **Sintopiya** - tevarakdagi a'zo va to'qimalarga nisbatan joylashishi.
- Tomir va nervlarning **proeksion chiziqlari**.

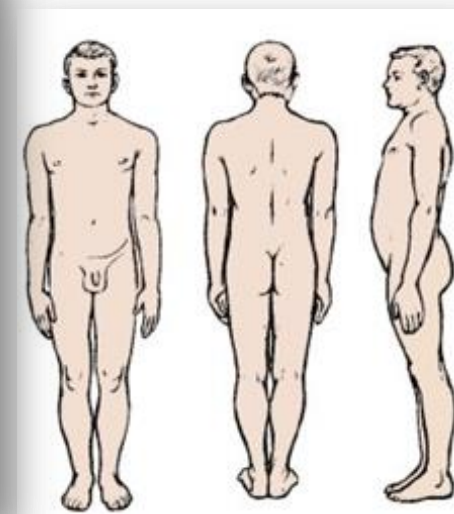
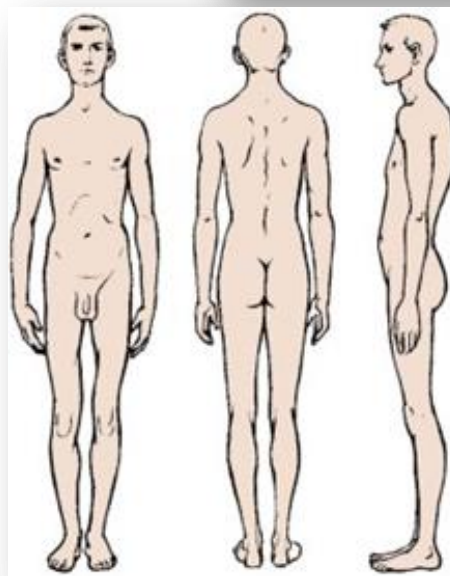
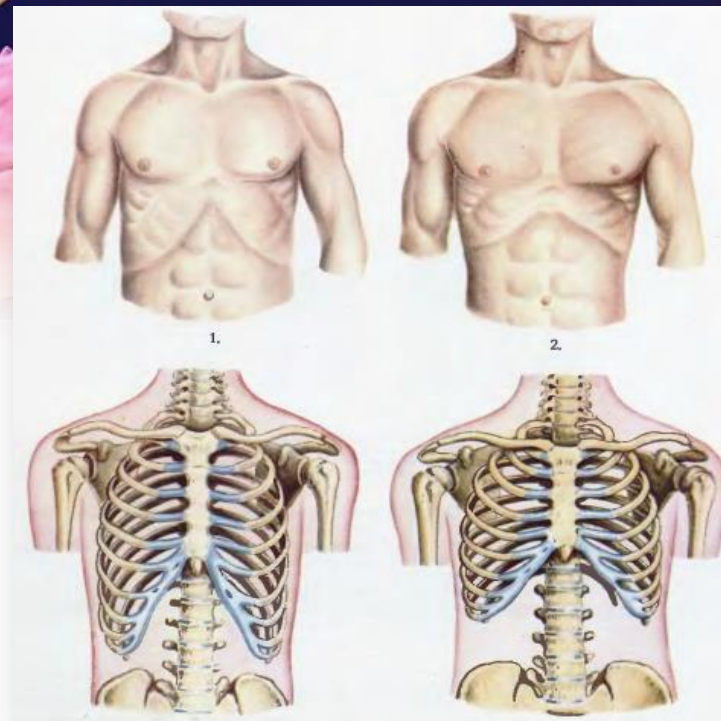


# Klinik anatomiyaning asosiy tushunchalari

**Tipga oid anatomiya** (V.N. Shevkunenko), a'zolarning tuzilishi va joylashuvi variantlarini o'rganadi.

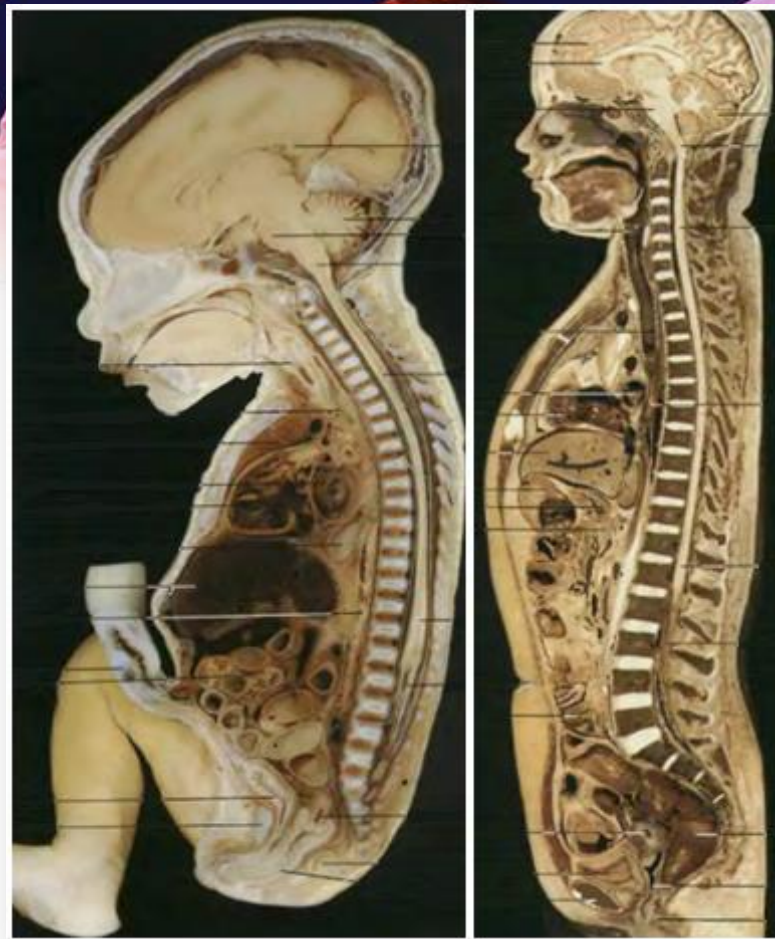
V.N. Shevkunenko maktabi **anatomik variantlarning chekka va oraliq shakllarini hamda turli a'zolarning joylashuv sathlarining har xilligini o'rganan.**

A'zo va to'qimalarning o'zaro joylashuvini ham normada, ham patologiya holatlarida o'rganish lozim.



## Klinik anatomiyaning asosiy tushunchalari

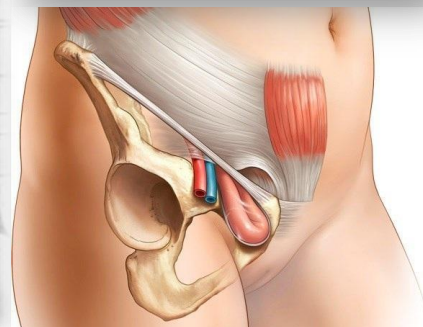
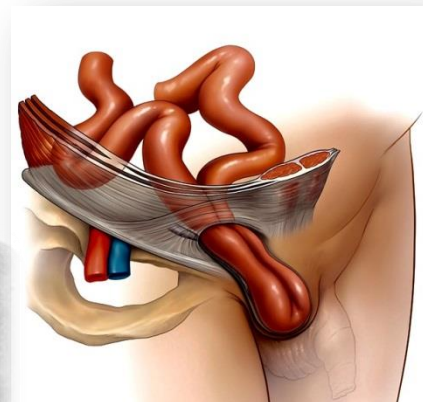
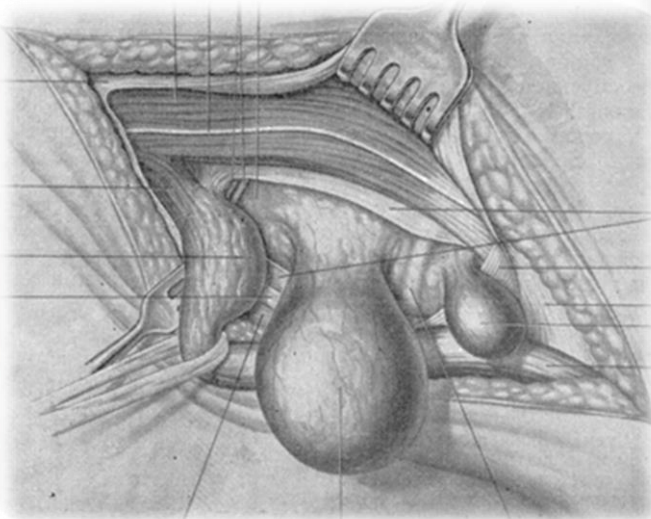
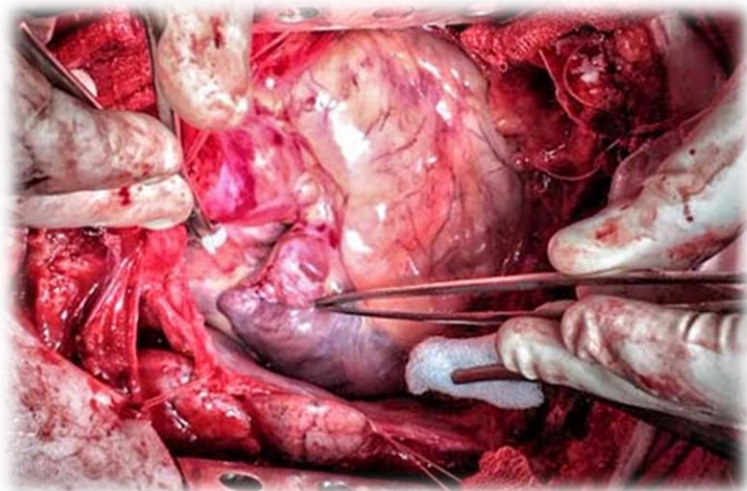
**Yoshga oid anatomiya** a'zolarning o'lchami, shakli va joylashuvidagi yoshga bog'liq tafovutlarni tasvirlaydi, bu pediatrlar va bolalar jarrohlari uchun muhimdir.



# Klinik anatomiyaning asosiy tushunchalari

## Jarrohlik anatomiyasi

a'zo va uni o'rab turuvchi anatomik tuzilmalarning patologiya sharoitidagi morfologiyasi haqidagi fan, chunki operatsiyani yallig'lanish infiltratlari, to'qimalar shishi sharoitida o'tkazish butunlay boshqachadir.



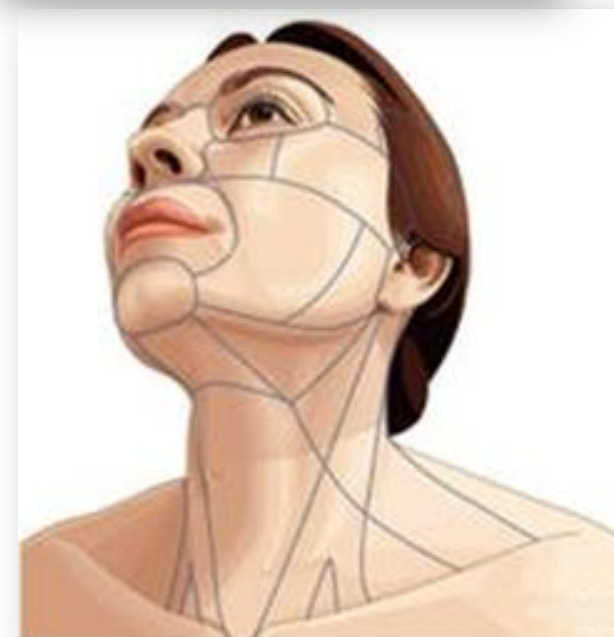
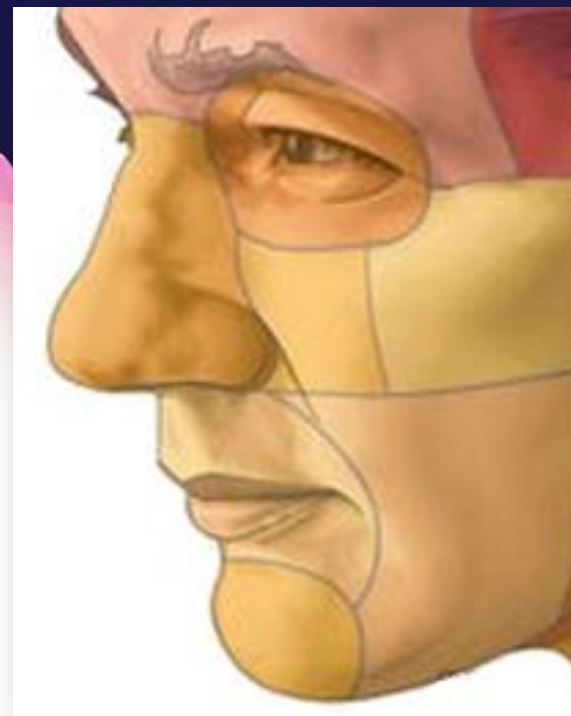
# Klinik anatomiyaning asosiy tushunchalari

Topografik anatomiya bir-biridan *shartli chegaralar* orqali ajratilgan sohalarda o'rganiladi.

Chegaralar *tashqi mo'ljallar* yordamida aniqlanadi.

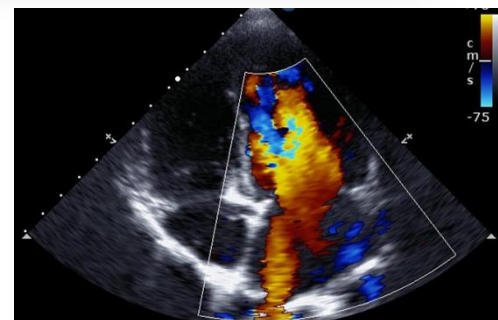
## Tashqi mo'ljallar

- 1) tabiiy teri burmalari;
- 2) tana yuzasidagi do'nglik va chuqurliklar;
- 3) suyak do'mboqlari;
- 4) muskullar konturlari;
- 5) qon tomirlar pulsatsiyasi.



# Klinik anatomiyaning asosiy tushunchalari

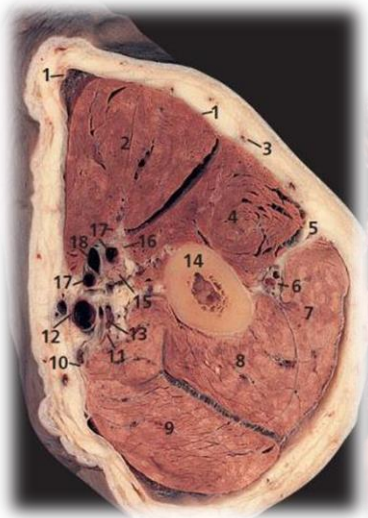
Tirik odamda ko'rikdan o'tkazish, palpatsiya, rentgenografiya, kompyuterli va magnit-rezonans tomografiya, UTT yordamida muhim topografo-anatomik ma'lumotlarni olish mumkin. Sohalarning aniq chegaralariga asoslanib u yoki bu patologik jarayonning joylashuvini aniqlab **status localis**ni belgilash va **topik tashxis** qo'yish mumkin.



# Klinik anatomiyanı murdada o'rganish usullari

## Qavatma-qavat preparovka.

1. Teri.
2. Teri osti kletchatkasi.
3. Yuza fassiya.
4. Xususiy fassiya.
5. Muskul.
6. Ichki fassiya.
7. Suyak yoki bo'shliq.

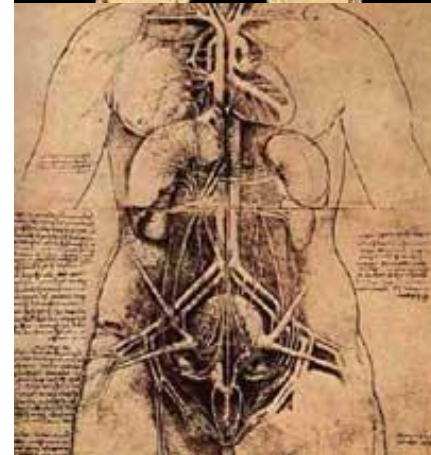
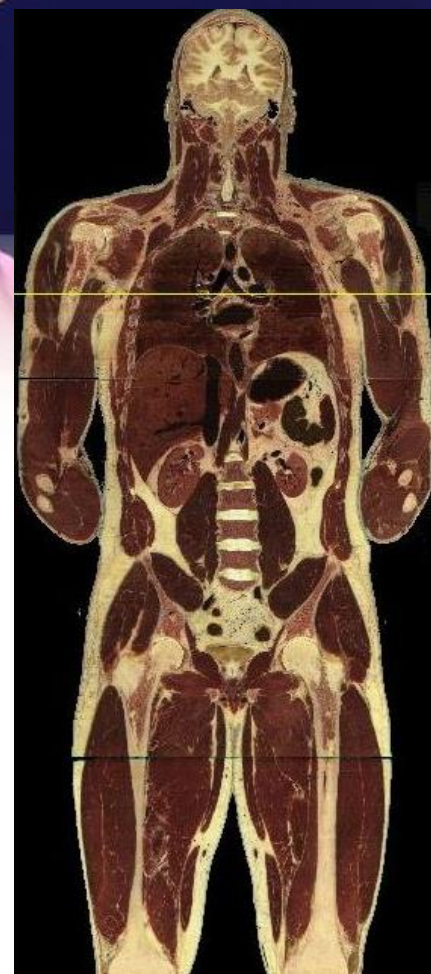
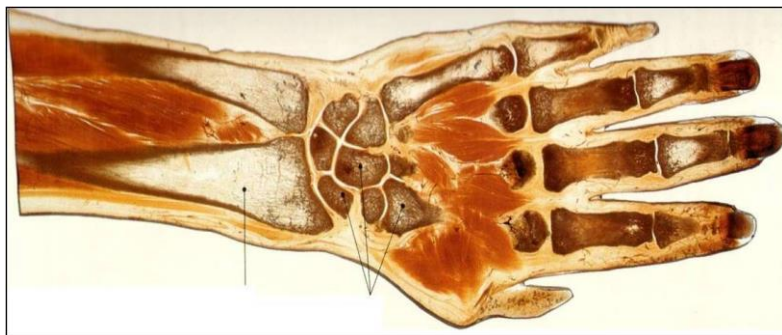


# Klinik anatomiyani murdada o'rganish usullari

*«Muz anatomiyasi»* (N.I. Pirogov) usulida muzlatilgan murdaning uchta perpendikulyar tekislikda kesilgan qismlari rasmda tasvirlanadi. Bu kompyuterli tomografiya va UTT mutaxassislarini tayyorlashda muhim bosqichdir.

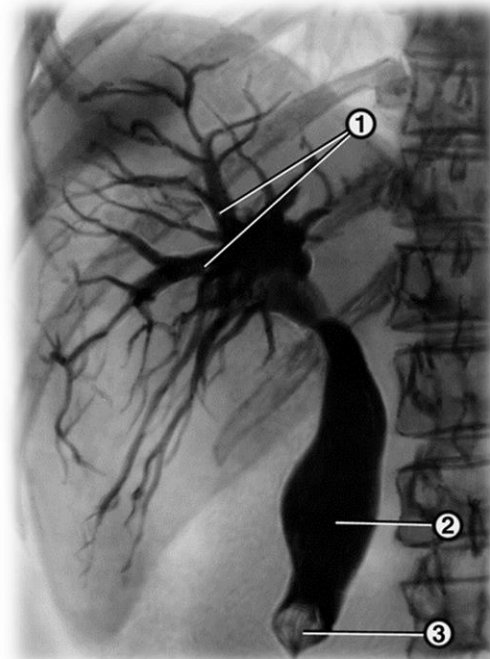
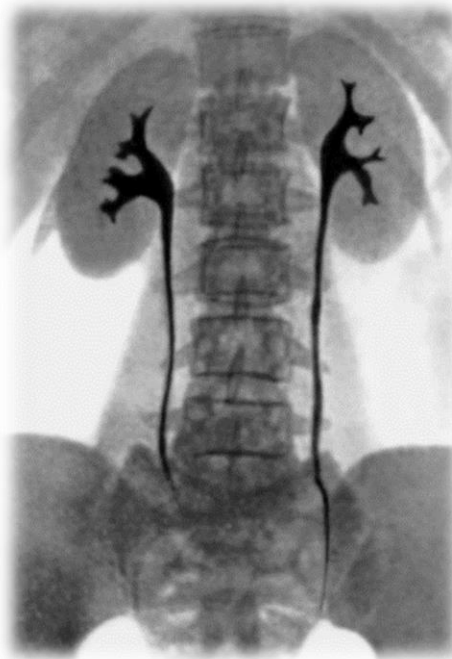
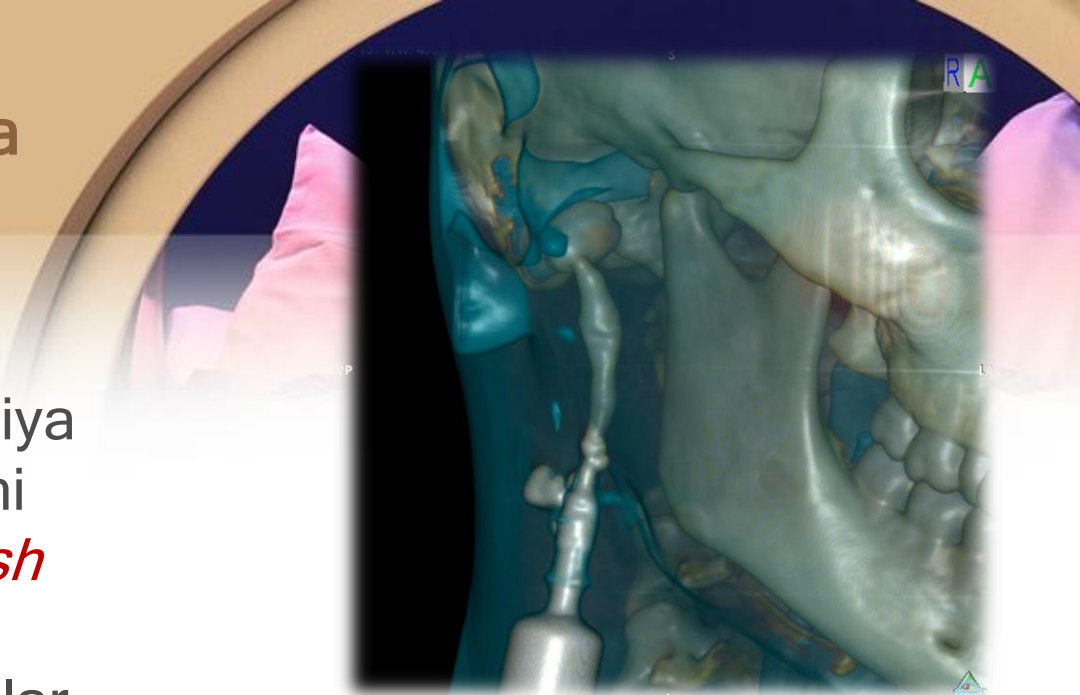
*«Anatomik haykaltaroshlik».*

*Anatomik eksperiment* usulida qorin va ko'krak bo'shliqlariga, oshqozonga, qovuqqa suyuqlik, ichakka havo yuborish orqali amalga oshiriladi.



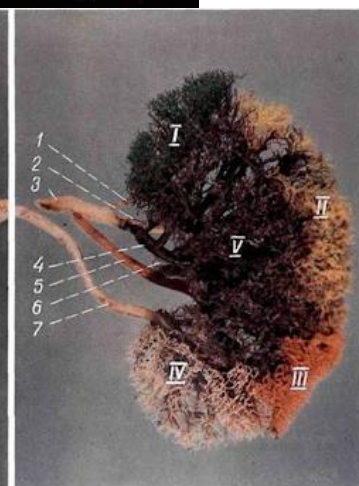
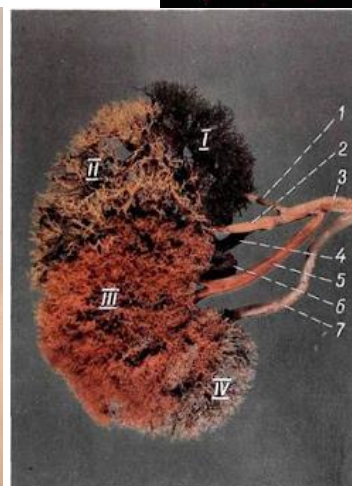
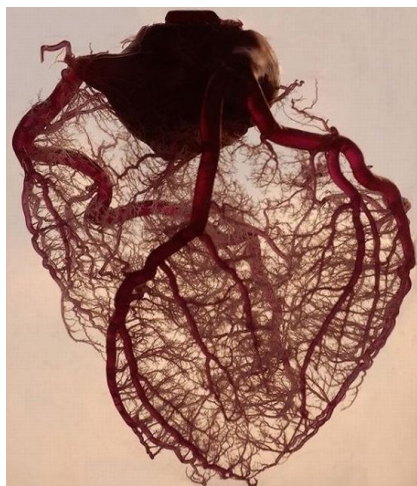
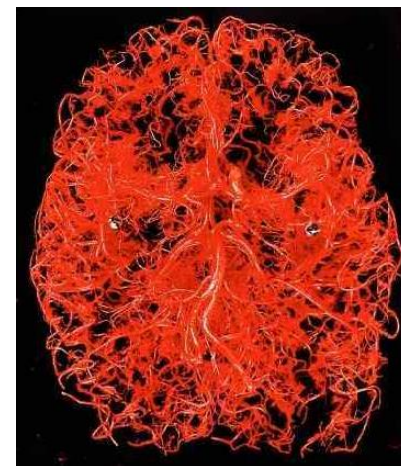
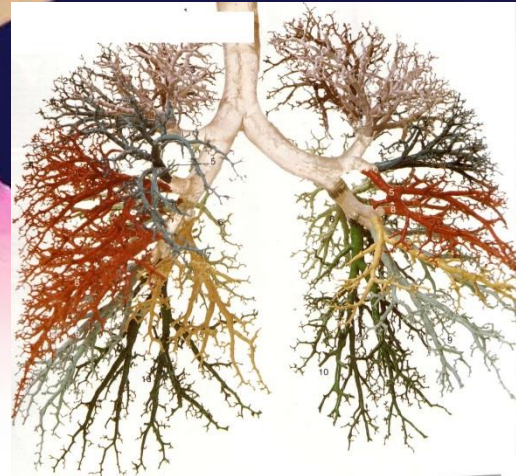
# Klinik anatomiyani murdada o'rganish usullari

Qon va limfa tomirlari, fassiya qinlari, kletchatka bo'shliqlarini o'rganishda *in'eksiya va quyish usullari* qo'llanadi: havo, turli ranglar, eritmalar, suspenziyalar, kontrast moddalar (rentgen tekshiruv uchun).



# Klinik anatomiyanı murdada o'rganish usullari

Parenximatoz a'zoldagi tomirlar  
(bronxlar, o't yo'llari) arxitektonikasini  
*korroziyalash usulida* o'rganishda  
ularga qotuvchi rangli moddalar  
yuborib, keyin qolipni a'zoning  
qoldiqlaridan yuvib tozalanadi.



## Tashhisni tasdiqlash

Tashxisning anatomik-fiziologik negizini tuzishda ko'plab kasalliklarning rivojlanish dinamikasini anglashda topografik anatomiyani o'rganish muhim.

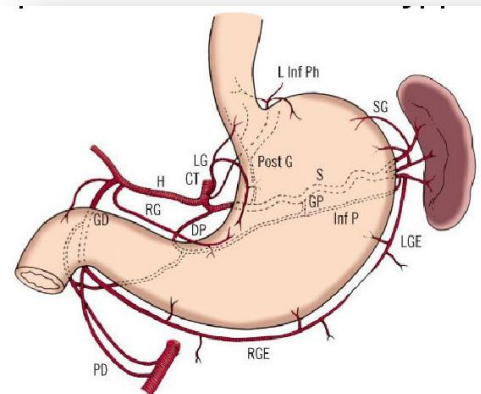
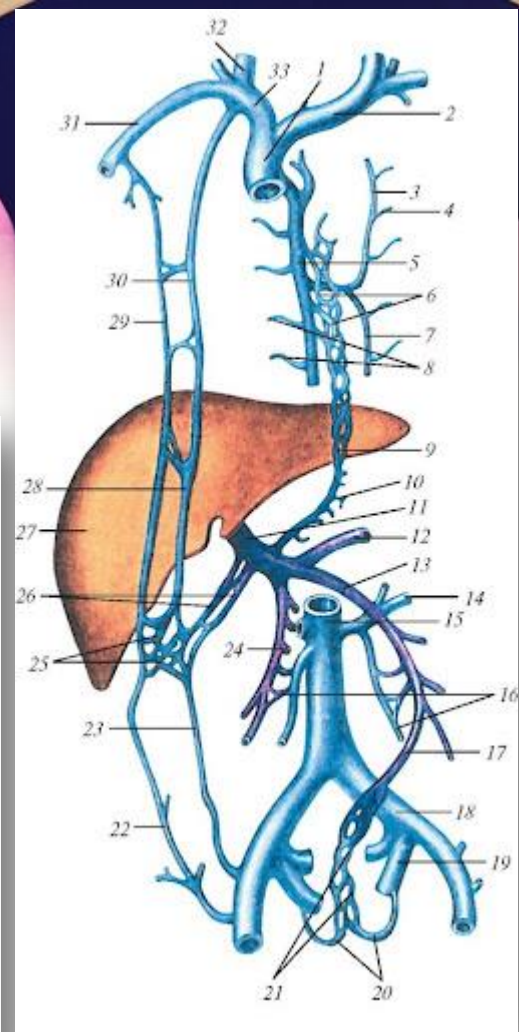
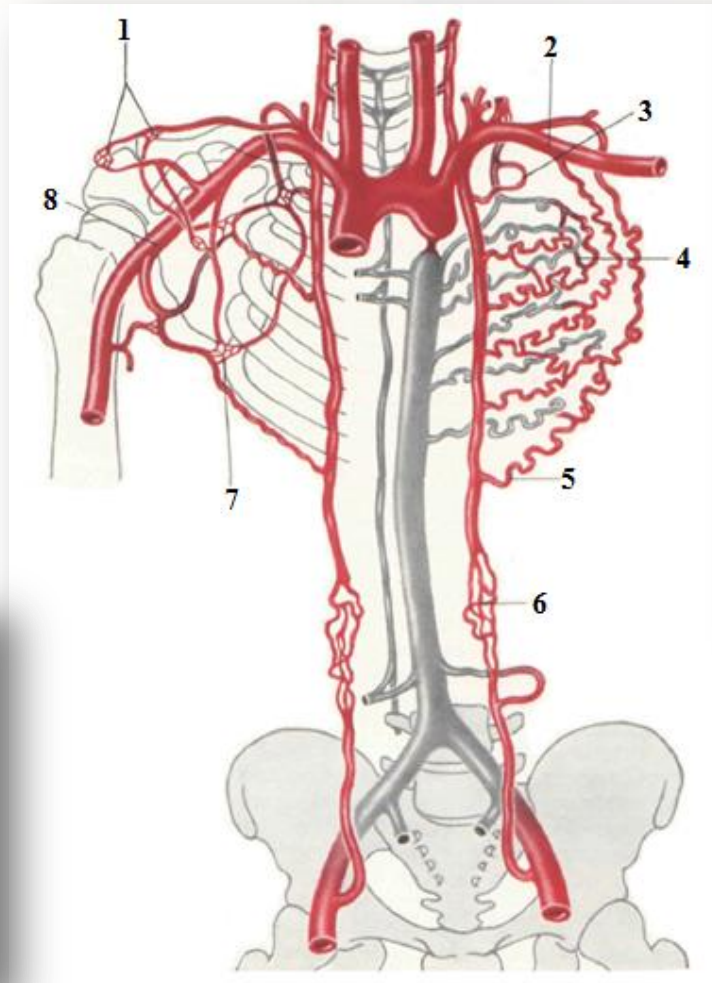
**Nima uchun I barmoq panaritsiysi V barmoqqa o'tib ketishi mumkin?**

Buning anatomik negizi shundaki, bosh va jimjiloq barmoqlarining sinovial qinlari bilak-kaft usti bo'g'imi sathida bevosita tegib turadi va ular bo'ylab infekciya tarqalishi mumkin.

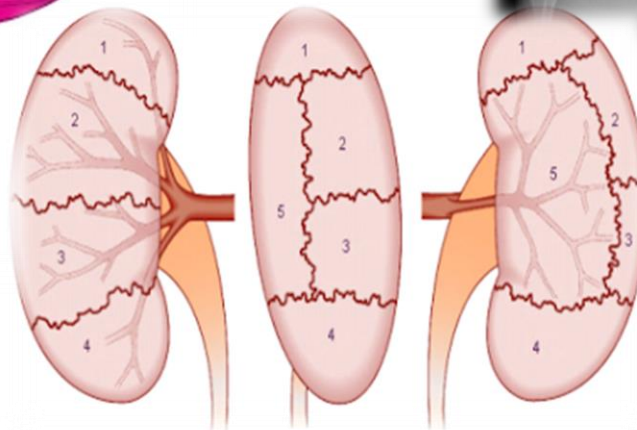
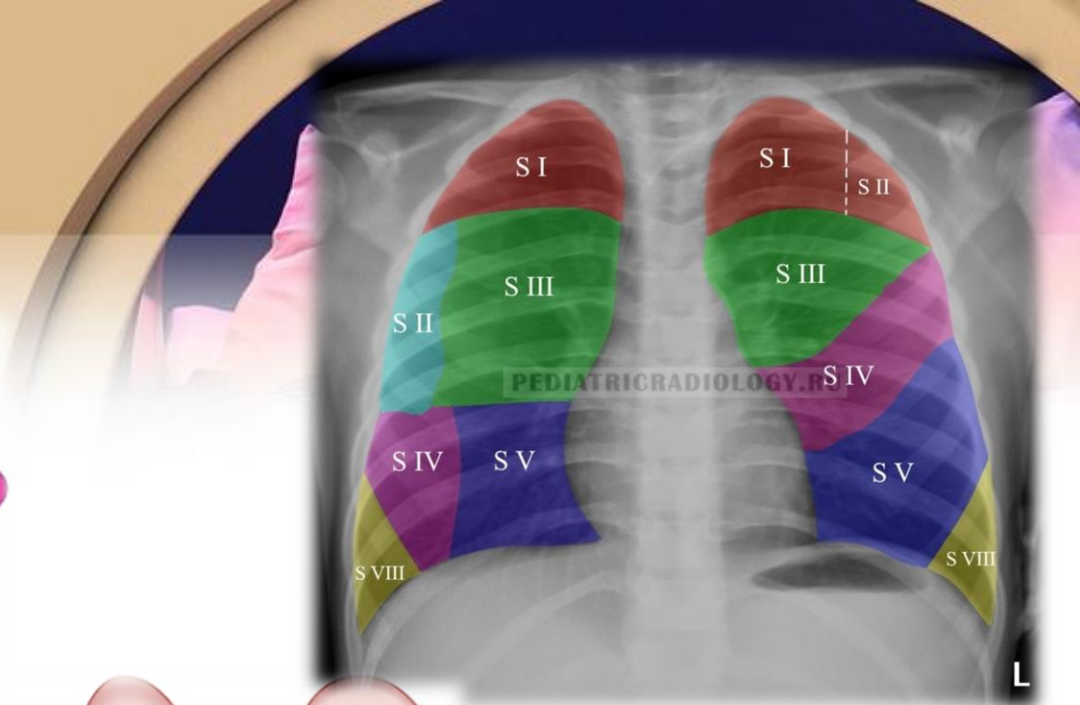
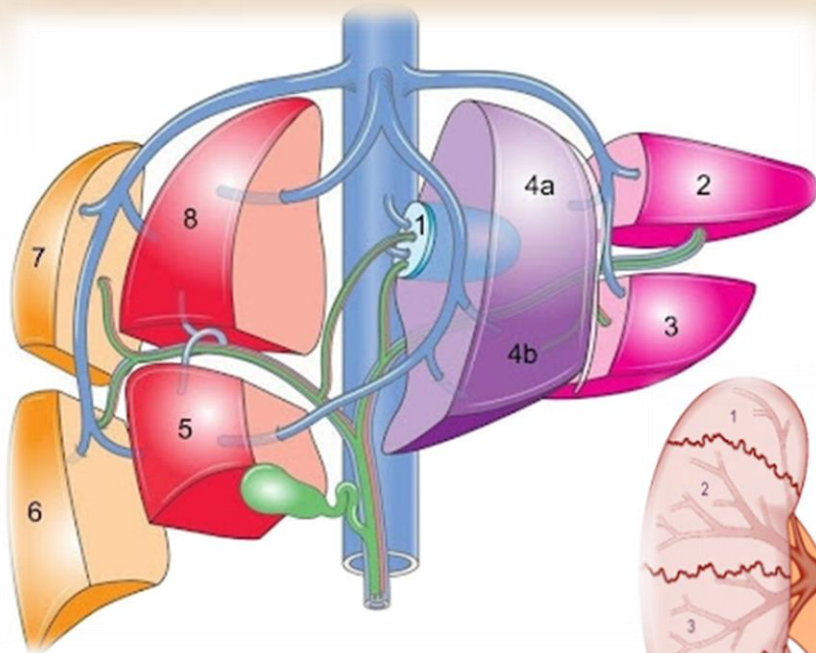


# Kollateral qon aylanish tizimi

- 1) tizim ichi
  - 2) tizimlararo
- kollateral anastomozlar



# A'zo ichki topografik anatomiyasi

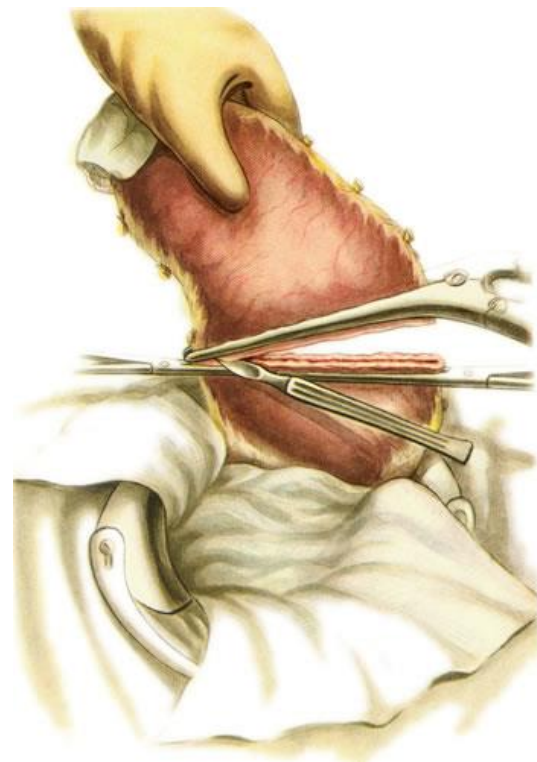
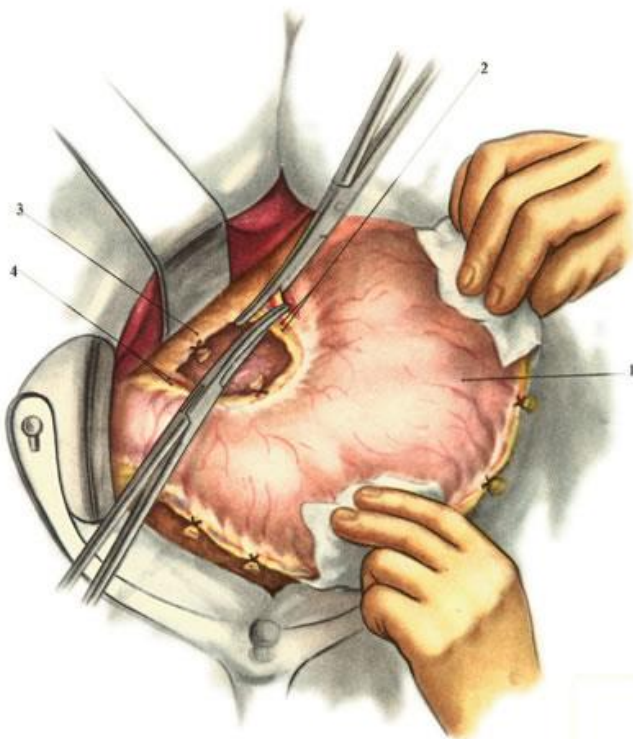
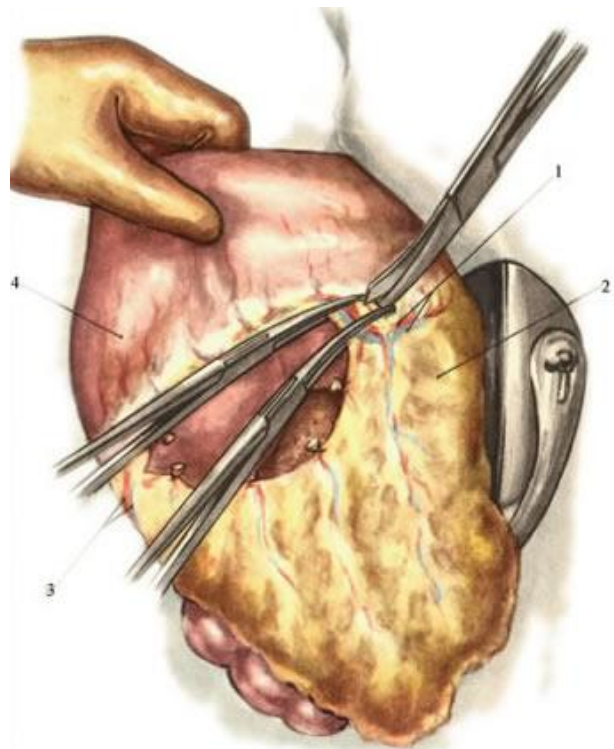


Segmentar tuzilish, qon tomir, nerv va limfatik naychalarning o'ziga xosligi, ma'lum a'zoning morfologik tuzilishidagi variantlari, operatsiya vaqtida yuzaga keladigan vaziyatlar, a'zoni rezeksiya qilish masalalari.

# Operativ jarrohlik



Operativ jarrohlik - jarrohlik operatsiyalari texnikasi, operativ aralashuvlar uslublari va qoidalari haqidagi ta'limot.



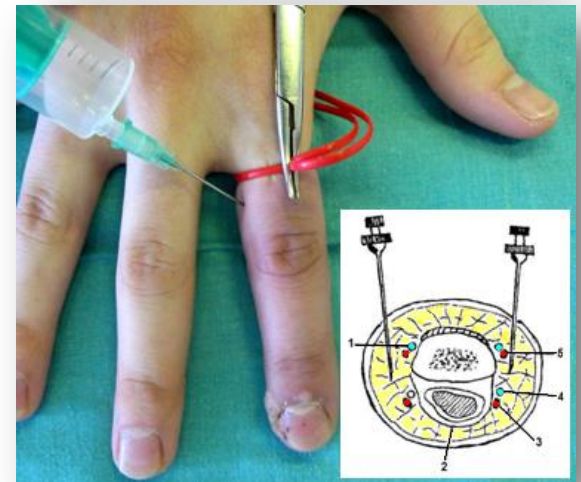
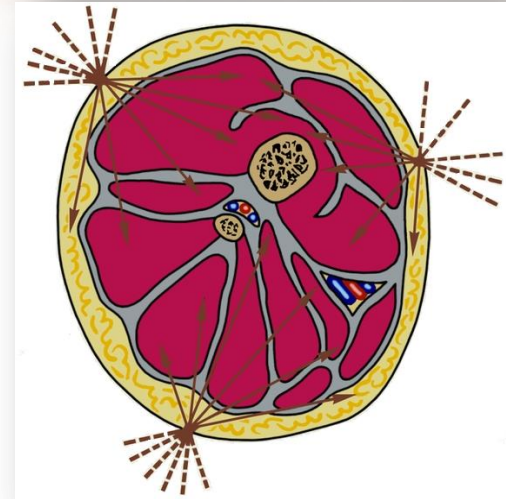
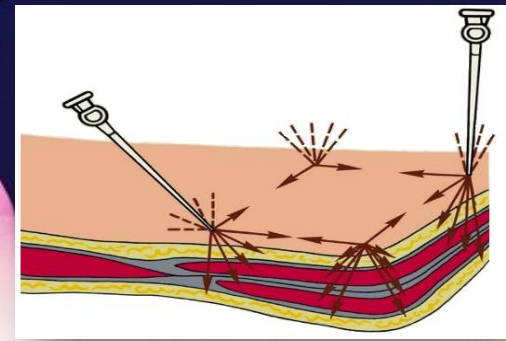
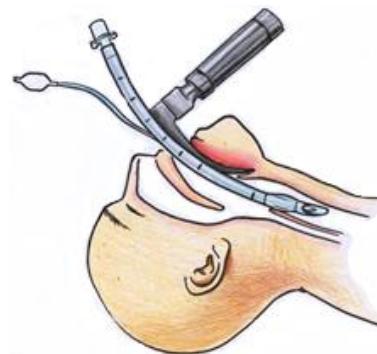
# Operativ jarrohlik. Operativ ochib kirish.

Barcha jarrohlik amaliyotlarida to'rtta bosqich ajratiladi:

## 1. Og'riqsizlantirish.

**Mahalliy** (infiltratsiyali, o'tkazuvchi, futlyar, ko'ndalang, orqa miya, sakral, suyak ichi).

**Umumiy** - ingalyatsion (niqobli, intubatsion, endotraxeal), noingalyatsion (tomir ichi).



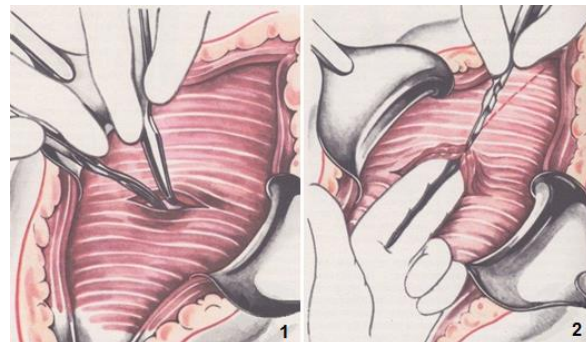
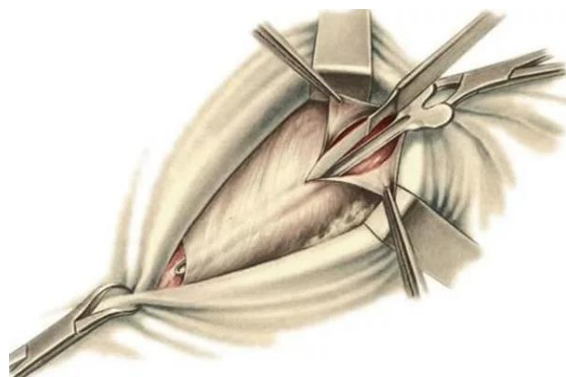
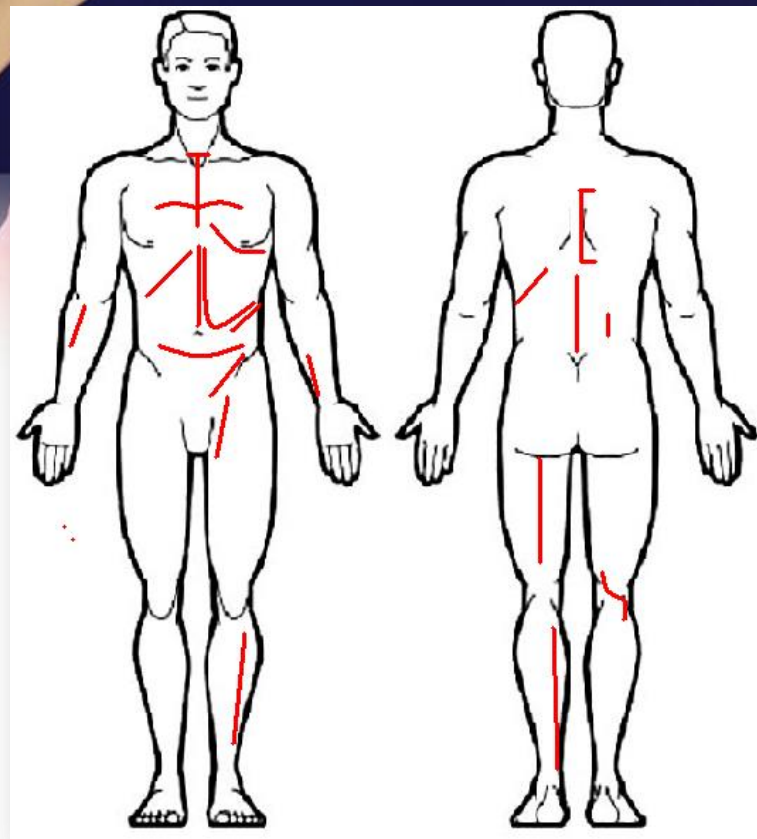
# Operativ jarrohlik

## 2. Operativ ochib kirish.

Operatsiyaning a'zoga eng kam shikast yetkazgan holda ratsional yetib borish va unda amaliyot o'tkazish uchun kenglikni ta'minlab beruvchi qismidir.

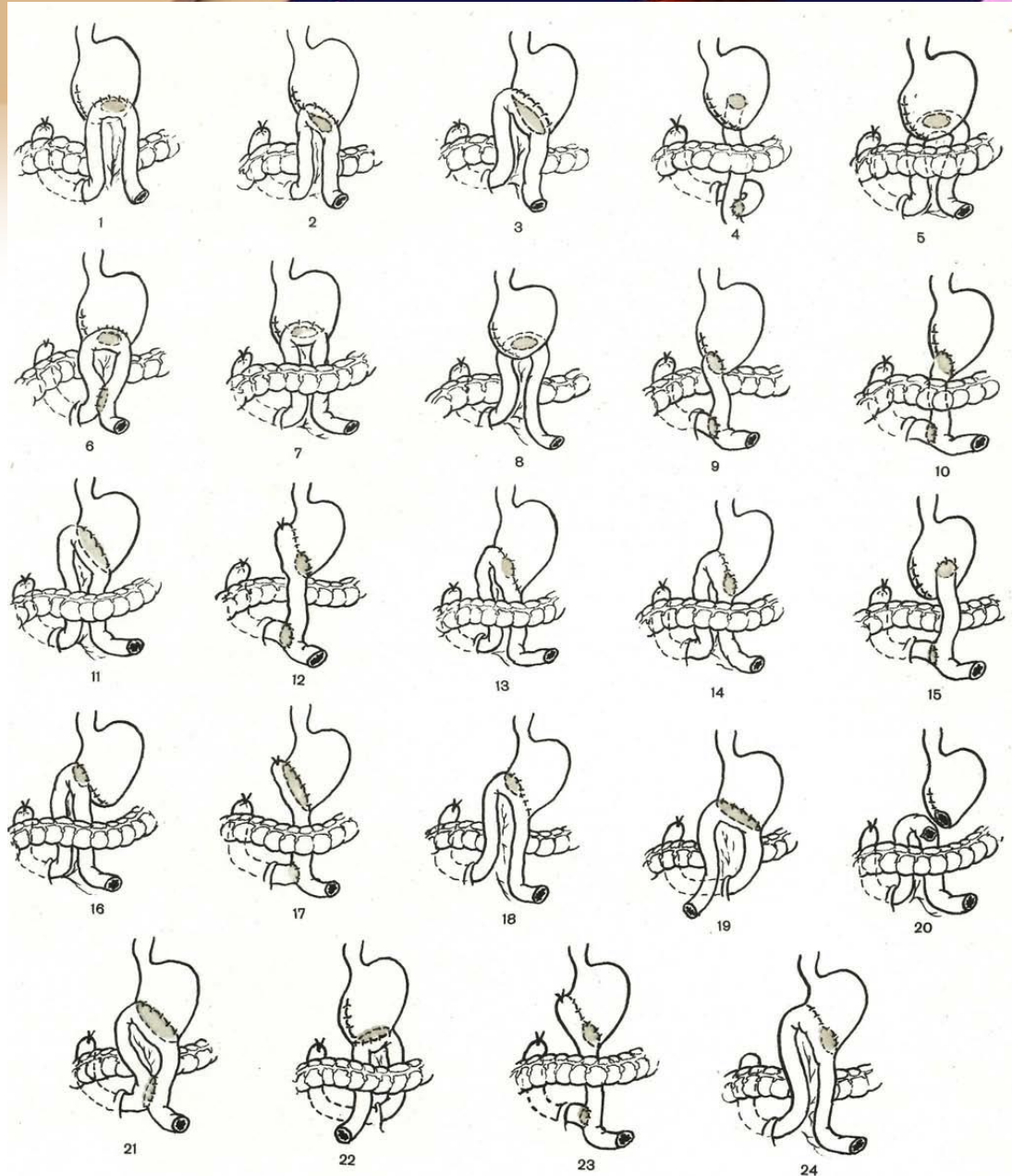
Barcha ochib kirishlar 5 guruhga ajratiladi:

*bo'ylama,*  
*qiyshiq,*  
*ko'ndalang,*  
*burchakli va*  
*kombinatsiyalangan.*



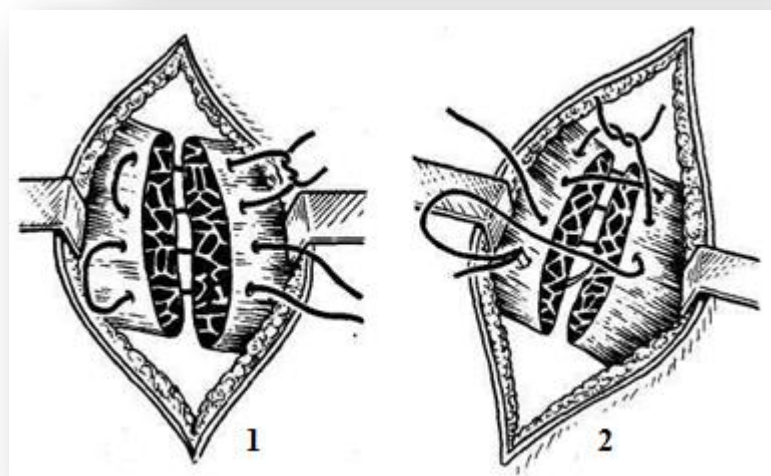
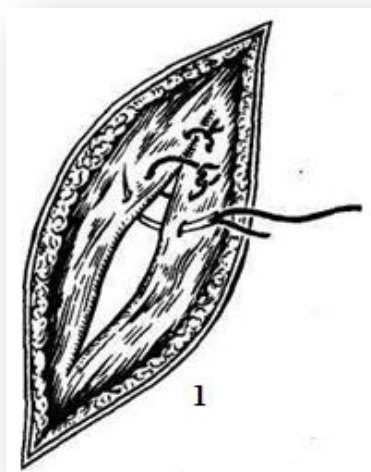
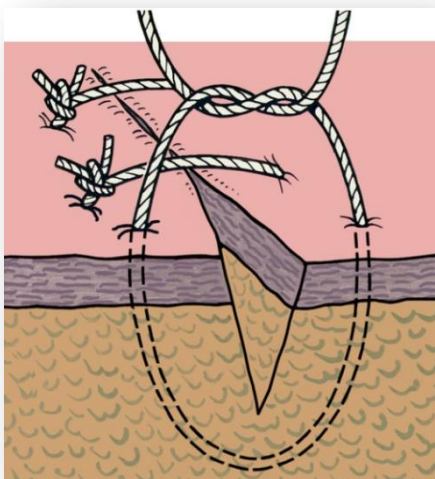
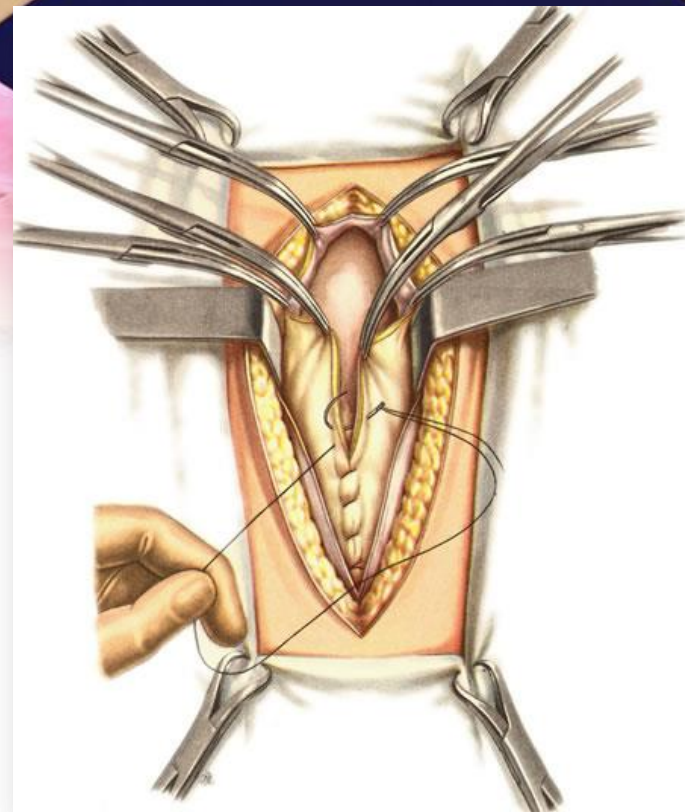
# Operativ jarrohlik. Operativ uslub

**3. Operativ uslub** - operatsiyaning zararlangan o'choqdagi asosiy qismi. Bitta kasallikning o'zida operatsiyaning bir qancha variantlarini qo'llash mumkin. Masalan, oshqozon rezeksiyasini Bilrot I, Bilrot II, Gofmayster-Finsterer, Xaberer uslublari bo'yicha bajarish mumkin.



# Operativ jarrohlik. Operativ uslub

**4. Operatsiyadan chiqish** - a'zodagi jarrohlik amaliyotini yakunlash bosqichi bo'lib, operativ ochib kirish natijasida buzilgan to'qimalar yaxlitligini tiklashni o'z ichiga oladi.



## Operativ jarrohlik. Operatsiya haqida tushuncha.



**Jarrohlik operatsiyasi** – bu bemor to‘qimalariga davolash yoki tashxislash maqsadida mexanik ta’sir etish bo‘lib, funksiyasi kasallik yoki shikast natijasida o‘zgargan ayrim a‘zo va tizimlarni tiklashga qaratilgan.

Operatsiya elementlari:

- 👉 **Birinchi** element – bu **to‘qimalarni ajratish**, uni to‘qimalarni skalpel yordamida kesib yoki pinset, zond yordamida to‘mtiq ravishda ajratish orqali amalga oshiriladi.
- 👉 **Ikkinchi** element – zararlangan tomirlardan **qon oqishini to‘xtatish**.
- 👉 **Uchinchi** element – **to‘qimalarni birlashtirish**, operatsiya jarayonida yoki kasallik yoxud shikast oqibatida buzilgan strukturalarning butunligini tiklash.



## **N.K.Burdenko uchligi (triadasi)**

- **Anatomik qulaylik** - shikastlangan a'zoga eng qisqa va xavfsiz yo'l.
- **Fiziologik ruxsat** - a'zo funksiyasini operatsiyadan keyin u yoki bu darajada saqlab qolish imkoni
- **Texnik imkoniyat** - jarrohlik aralashuvining murakkab bosqichlarini mexanizatsiyalash.



## Operatsiyaga ko'rsatmalar

- **Absolyut ko'rsatmalar.** Bunda bemorga davolashning operatsiya uslubidan boshqa yordam bera olish yo'li yo'q bo'lganda shifokorni operatsiya qilishga majbur qiluvchi holatlar. Masalan, siqilgan churralar, magistral qon tomirning yorilib ketishi, qo'l-oyoq gangrenasi kabilar.
- **Nisbiy ko'rsatmalar** konservativ yo'l bilan davolab bo'lmaganda, operatsiya uchun qulay paytni tanlashga, operatsiyaga mavjud moneliklarni bartaraf qilishga imkon beruvchi holatlar.

Operativ jarrohlik.  
Operatsiya haqida tushuncha.



## Operatsiyani o'tkazish rejasi

- Kasallik tashxisini to'g'ri aniqlash.
- Og'riqsizlantirish usulini tanlash.
- Kasallangan a'zoga muqobil ochib kirish yo'lini tanlash.
- Kasallikka mos keluvchi operatsiya amaliyotini tanlash.
- Operatsiyadan keyingi parvarishni to'g'ri tashkil qilish.
- Operatsiya natijalarini tanqidiy baholash.

# Operativ jarrohlik. Operatsiya haqida tushuncha.



## Jarrohlik operatsiyalari turlari:

- shoshilinch (urgent);
- rejali;
- radikal;
- palliativ;
- tanlov operatsiyasi;
- zaruriyat operatsiyasi;
- bir lahzali;
- ikki lahzali;
- ko'p lahzali;
- qo'shma (simultan) - turli a'zolarida bir nechta har xil kasalliklarda bir vaqtda bajariladigan;
- Kengaytirilgan (onkologiyada);
- kombinatsiyalangan - bitta kasallikda bir nechta a'zolarida ikki va undan ko'p operatsiyalar.

# Operativ jarrohlik. Jarrohlik asboblari



Jarrohlik asboblari quyidagi guruhlarga ajratiladi:

- **to‘qimalarni ajratish uchun asboblari**. Ularga turli skalpellar, amputatsiya pichoqlari, qaychilar, arralar, iskana va boshq. kiradi.
- **qon to‘xtatish uchun asboblari** – turli tipdagi qisqichlar (Xolsted, Pean, Bilrot, Koxer va boshq.), ligatura ninalari (Deshan, Kuper), elektrokoagulyatorlar va h.k.
- **yordamchi-fiksatsiyalovchi asboblari** – pinsetlar, ilmoqlar, zondlar.
- **to‘qimalarni birlashtirish uchun asboblari**. Ularga ninalar, ninatutqichlar, turli xildagi tikuvchi uskunalari (NJKA, UKL, UTL, tomir tikuvchi uskuna, videoendoxirurgiyada qo‘llanuvchi stepler, klepperlar va boshq.).
- **maxsus asboblari** ayrim operatsiyalarda qo‘llanuvchi asboblari. Masalan, traxeotomik kanyulyalar, amputatsiya pichoqlari, trepanlar, ichak jomlari va h.k.

Operativ jarrohlik.  
Jarohatga jarrohlik ishlovi berish  
tamoyillari.

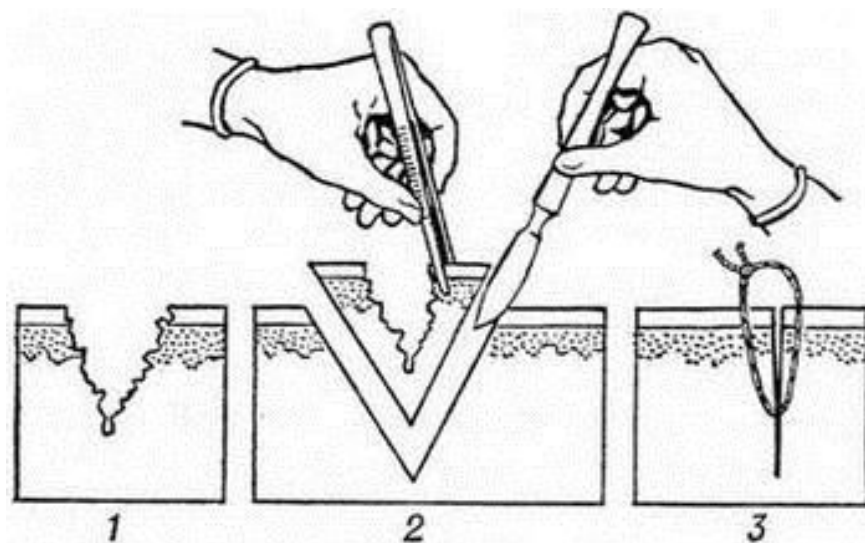
1. **Jarohatni tozalash** (tualet).
2. **Jarohat chetlarini kesib olib tashlash.**
3. **Jarohat tubini kesib olib tashlash.**
4. **To'liq gemostaz.**
5. **Jarohatni tikish** (birlamchi chok, ikkilamchi chok).
6. **Bog'lam qo'yish.**

Jarohatga jarrohlik ishlov  
berish turlari:

**Erta** - 24 soat mobaynida.

**Kechiktirilgan** - 48 soat ichida.

**Kech** - 48-72 soat mobaynida.





E'TIBORINGIZ UCHUN  
RAHMAT!