

# Obstetric haemorrhage

# Classification

- ▶ 1. Bleeding of the 1st half of pregnancy
- ▶ 2. Bleeding of the 2nd half of pregnancy
- ▶ 3. Bleeding in labour and postpartum period

# Reasons

- ▶ . Gravidarum (related to pathology of fetal egg)
  - ectopic pregnancy
  - cervical pregnancy
  - trophoblastic disease
- ▶ spontaneous abortion
- ▶ 2. Extragravidarum (pathology of genital organs)

# Ectopic pregnancy

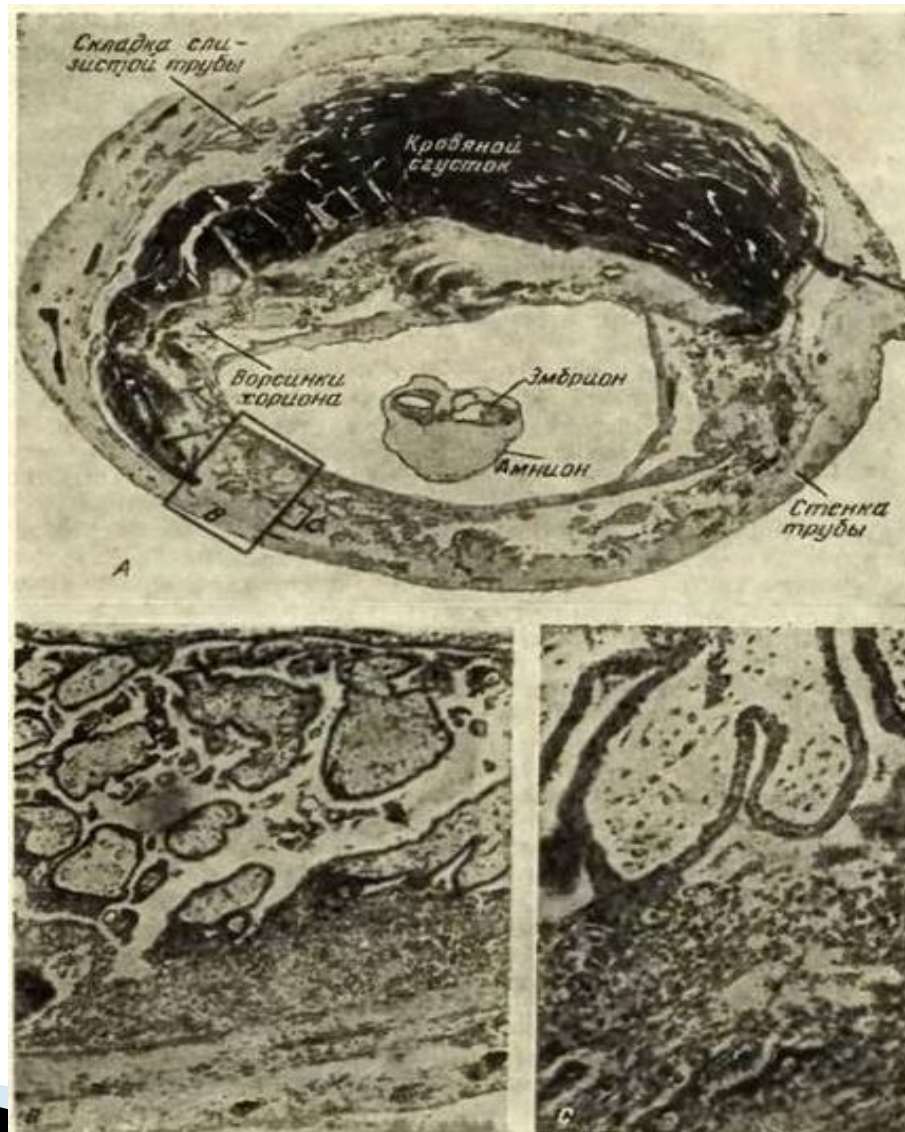


# Etiology of ectopic pregnancy.

- Infection of organs of small pelvis.
  - ▶ An infectious process is in an endosalpinx
  - ▶ Chronic inflammatory diseases of organs of small pelvis
- Narrowing of salpinx
  - ▶ Congenital defects of salpinx (for example, diverticulums and pockets)
  - ▶ Benign tumours or cysts of fallopian tubes
  - ▶ Fibromyoms of uterus in area of tube corner
  - ▶ Endometriosis of fallopian tubes
  - ▶ Adhesions near the tubes
  - ▶ Surgical intervention on salpinxs
- Migration of the impregnated ovule
  - ▶ During external migration(from an ovary in an opposite salpinx through an abdominal region) a blastocyst has time so to increase, that does not pass through the narrow isthmus of tube.
  - ▶ The impregnated ovule can also get through an uterus(internal migration) and get in an opposite tube.

# Tube pregnancy with embryo (1 month)

- A. a cut through all tube with an embryo; B. implantation of chorion in a tube; C. chorion villi





## PATHOGENY OF ECTOPIC PREGNANCY.

- ▶ Developing ectopic pregnancy stretches fetal receptacle, and chorionic villi invade the thin wall of fallopian tube, including blood vessels. This process can flow with different speed depending on the place of localization and accompanied by bleeding expressed more or less.  
In case of tubal abortion exfoliating of an embryo from tube wall and its passing into abdominal cavity take place.
- ▶ In rare cases the fetal egg exfoliated from a tube does not perish, and implanted in an abdominal region and continues to develop. Development of ovarioecyosis, that rarely exists long time and results in the break of fetal receptacle ended with considerable bleeding, is possible in certain terms

## Abnormal places of embryo implantation

*A* - implantation into the broken follicle

*B* - implantation on the serous surface of the rectum

*C* - implantation in the Douglas pouch

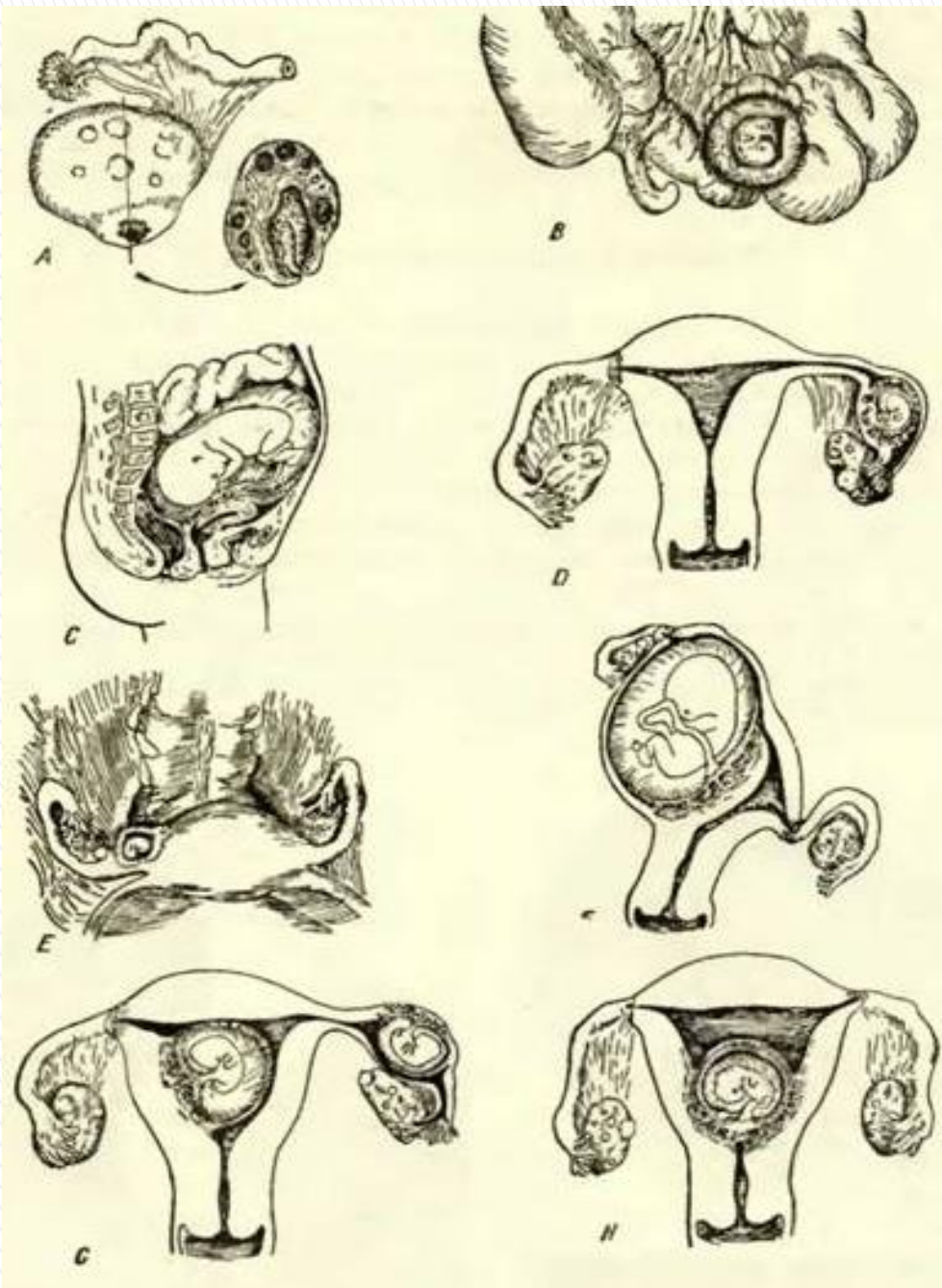
*D* - implantation in the ampullar portion

*E* - tube pregnancy in the isthmic portion

*F* - interstitial pregnancy

*G* - at the same time normal and tube pregnancy

*H* - a schematic picture showing early connections chorion with by an uterus





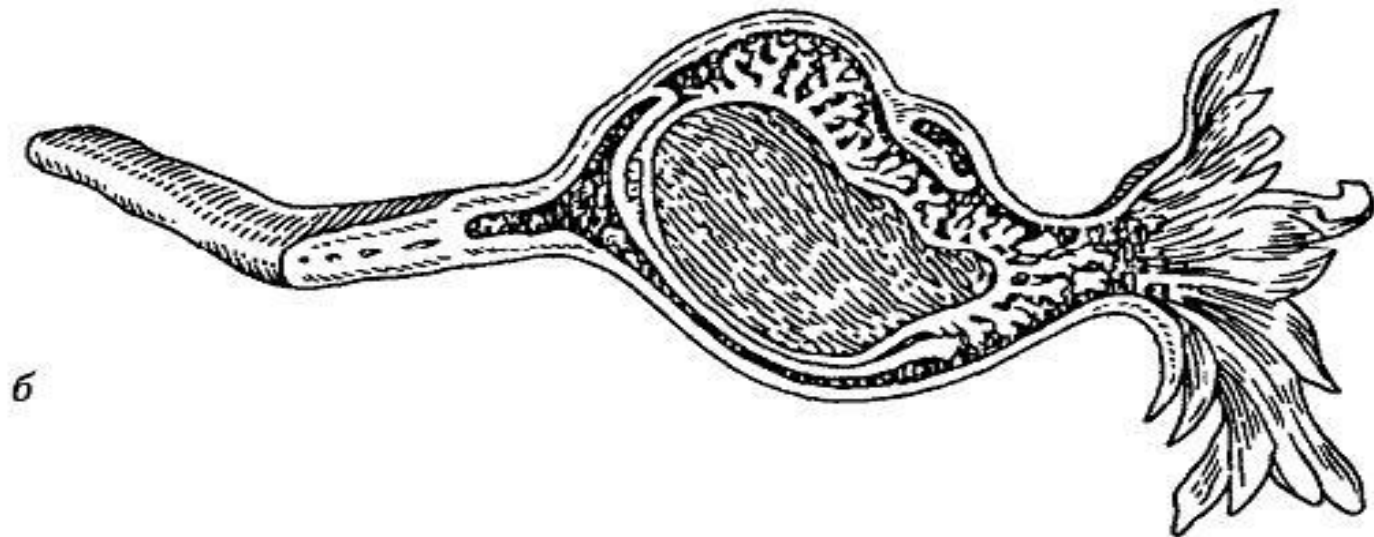
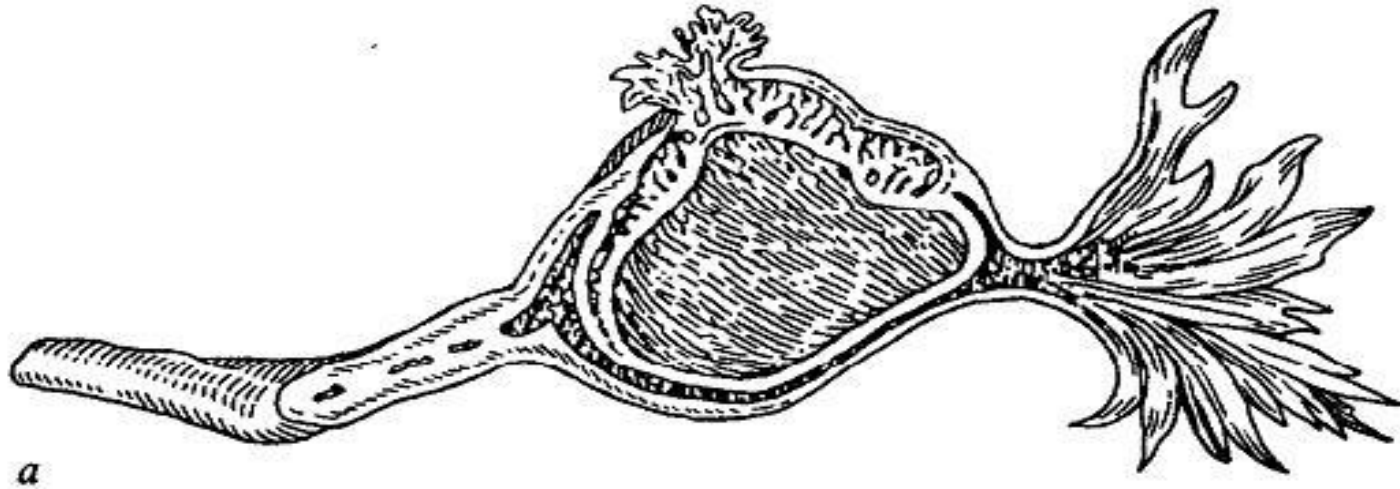
# Diagnostic of ectopic pregnancy

- ▶ **Clinic of tubal Rupture.** Suddenly appear acute pain in the lower abdomen and in the inguinal area, irradiated in the shoulder, shoulder-blade, rectum. Frequent symptoms: cold sweat, loss of consciousness.
- ▶ **1. Objective examination:** fall of BP, threadlike pulse, acute pallor. Palpation of the abdomen is very painful, more on the affected side, symptom Schotkin-Blumberg is weakly positive. On percussion—there are signs of free liquid in the abdomen cavity.
- ▶ **2. Vaginal investigation.** Uterus body is enlarged insignificantly, soft; more mobile, than usually (*floating uterus*). The puffiness in the adnexal area. Tender and doughy mass is palpable in the pouch of Douglas, sharply painful during palpation (*Douglas's loud call*). Tenderness on displacement of cervix.
- ▶ **Clinic of tube abortion.** At terminated of pregnancy on the type of tube abortion are paroxysmal pain in the lower abdomen, appear bloody discharges. Condition of short time unconsciousness.
- ▶ **1 Vaginal investigation.** Uterus is soft, slightly enlarged. Tumor like formation in the affected side is palpated, painful, slightly mobile. Painfulness at removal of the uterus anteriorly and at palpation of posterior vaginal fornix expressed weaker, than at tubal rupture. There are discharge of decidua membrane from uterine cavity
- ▶ **2.** At histological investigation of decidua membrane or brush cytology of the uterus revealed elements of decidua tissues without chorion.

# Tubal pregnancy:

a – tubal rupture

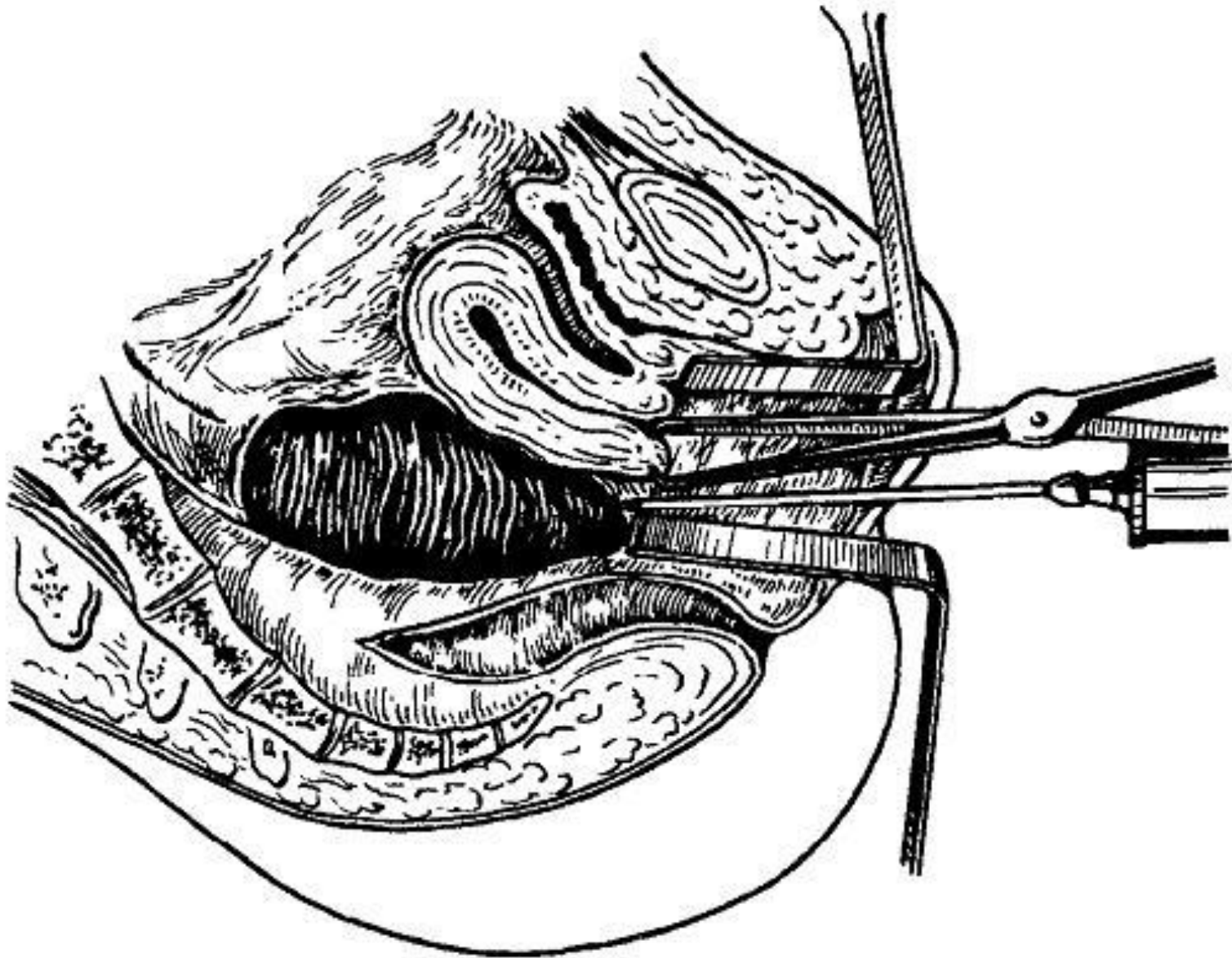
b – *tubal abortion*



## Methods of diagnostic of ectopic pregnancy

- ▶ **Determination of the level of HGT in the serum, in urine .**
- ▶ **USE of organs of small pelvis**
- ▶ **Tranvaginal USE**
- ▶ Abdominal paracentesis of posterior fornix for revealing of free blood in the abdomen cavity with complains on acute pain in the lower abdomen and pathological bleeding, syncope or shock.
- ▶ Laparoscopy gives an opportunity of examination of tubes and ovaries, if diagnosis is doubtful.
- ▶ **Histological investigation of endometrium.** Decidua tissues without chorion villi in edometrium which were got at uterine abrasion in the case of pathological bleeding indicates on ectopic pregnancy

# Diagnostic paracentesis over posterior fornix at retrouterine haematoma





## Treatment of ectopic pregnancy.

Surgical treatment with using of laparotomic or laparoscopic approach

▶ **Operations performed at interruption pregnancy**

▶ **1. Salpingo-ovariectomy.**

▶ **2. Salpingectomy.**

Operations performed at developing tube pregnancy.

▶ **1. Extrusion.**

▶ **2. Salpingostomy.**

▶ **3. Segmental resection of fallopian tube.**

Operation at abdominal pregnancy.

▶ Operation technics depend on localization of the fetal egg. Usually it is evacuation of the fetal egg and subsequent hemostasis.

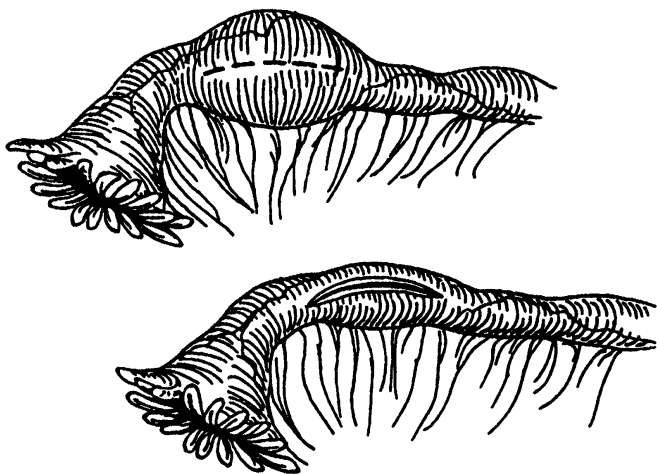


# Surgical treatment of tubal pregnancy

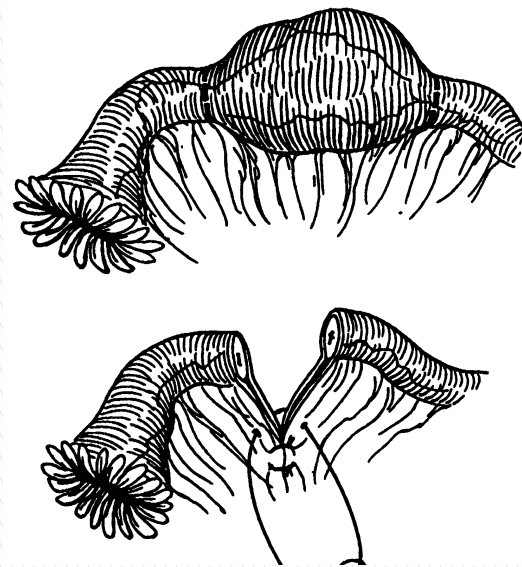
Tube ectomy: A –decussation; Б – tube was cut



Longitudinal salpingotomy



Segmental resection of the tube



## Conservative methods of treatment of ectopic pregnancy.

- ▶ In the developing pregnancy of early age successfully use **Methotrexate** (antagonist of folic acid). Complication – massive bleeding from the place of localization of the fetal egg after 1–2 weeks of rebound.

### **After-care of reproductive function.**

- ▶ It is necessary to care about tubal possibility by means of hydrotubations.
- ▶ Sanatorium–health–resort cure.
- ▶ Antiinflammatory therapy in the post-operative period.
- ▶ ECF.

