

# Rupture of uterus

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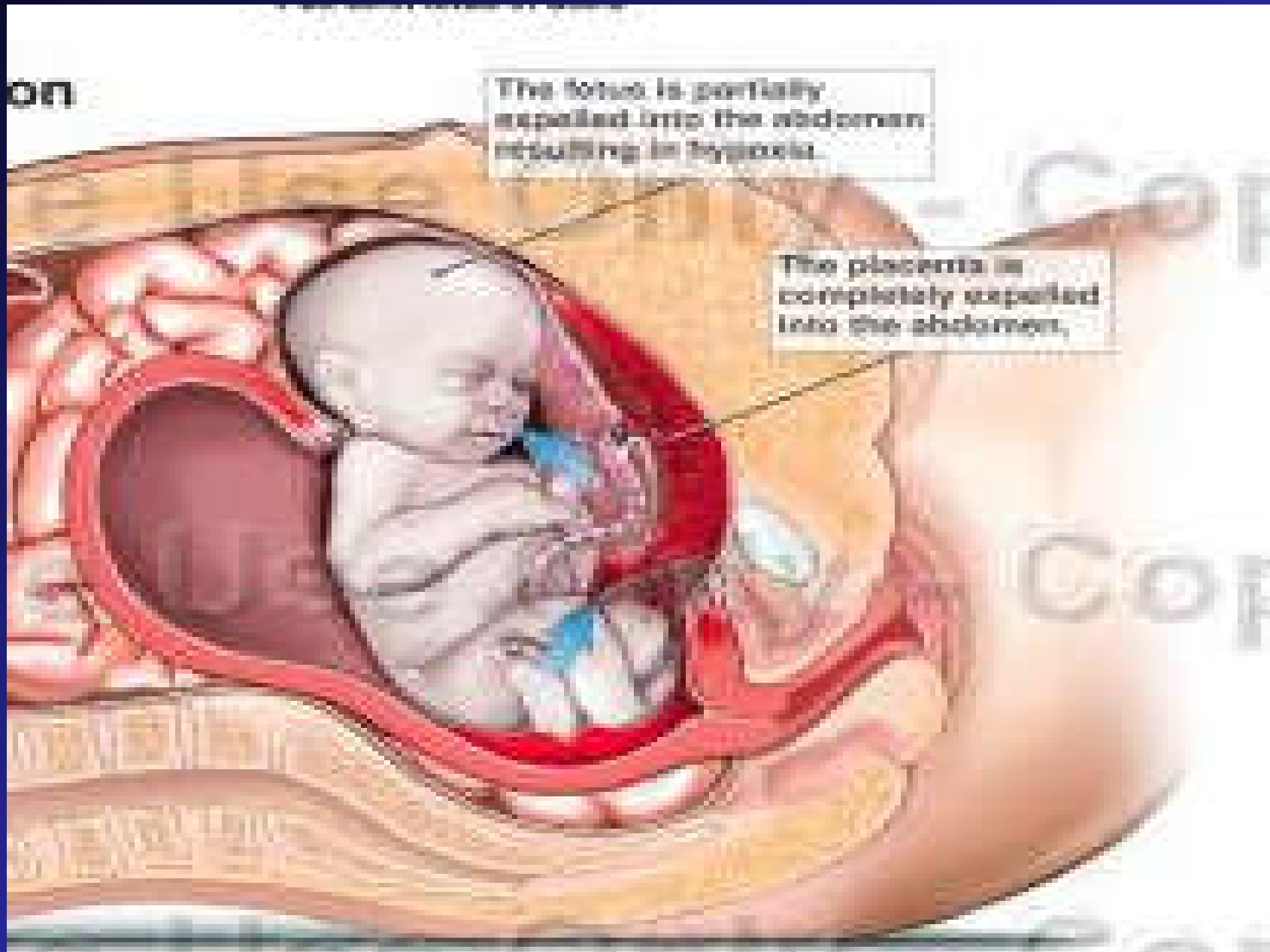
# ***RUPTURE OF THE UTERUS***

- a potential obstetric catastrophe
- a major cause of maternal death.
- The incidence of uterine rupture is approximately 1/ 1500 deliveries.

# Definition

- Separation of the muscular wall of the uterus
- usually occurs during labor
- occasionally happen during the later weeks of pregnancy

# *RUPTURE OF THE UTERUS*



# causes

## During pregnancy

- weak scar after previous operations on the uterus
- History of cesarean section (VBAC, vaginal birth after c- section)
- myomectomy
- excision of a uterine septum
- previous perforation of uterus(D&C, hysteroscopy, forceps delivery)

## During labor:

- uterine hyper-stimulation(oxytocin with pitocin induction or argmentation of labor)
- obstructed labor(macrosomia, feopelvic dispropotion)
- intrauterine manipulation(internal version,manual removal of an adherent placenta)
- forcible dilatation(cervical tear)
- a weak scar(C-section or other operations)

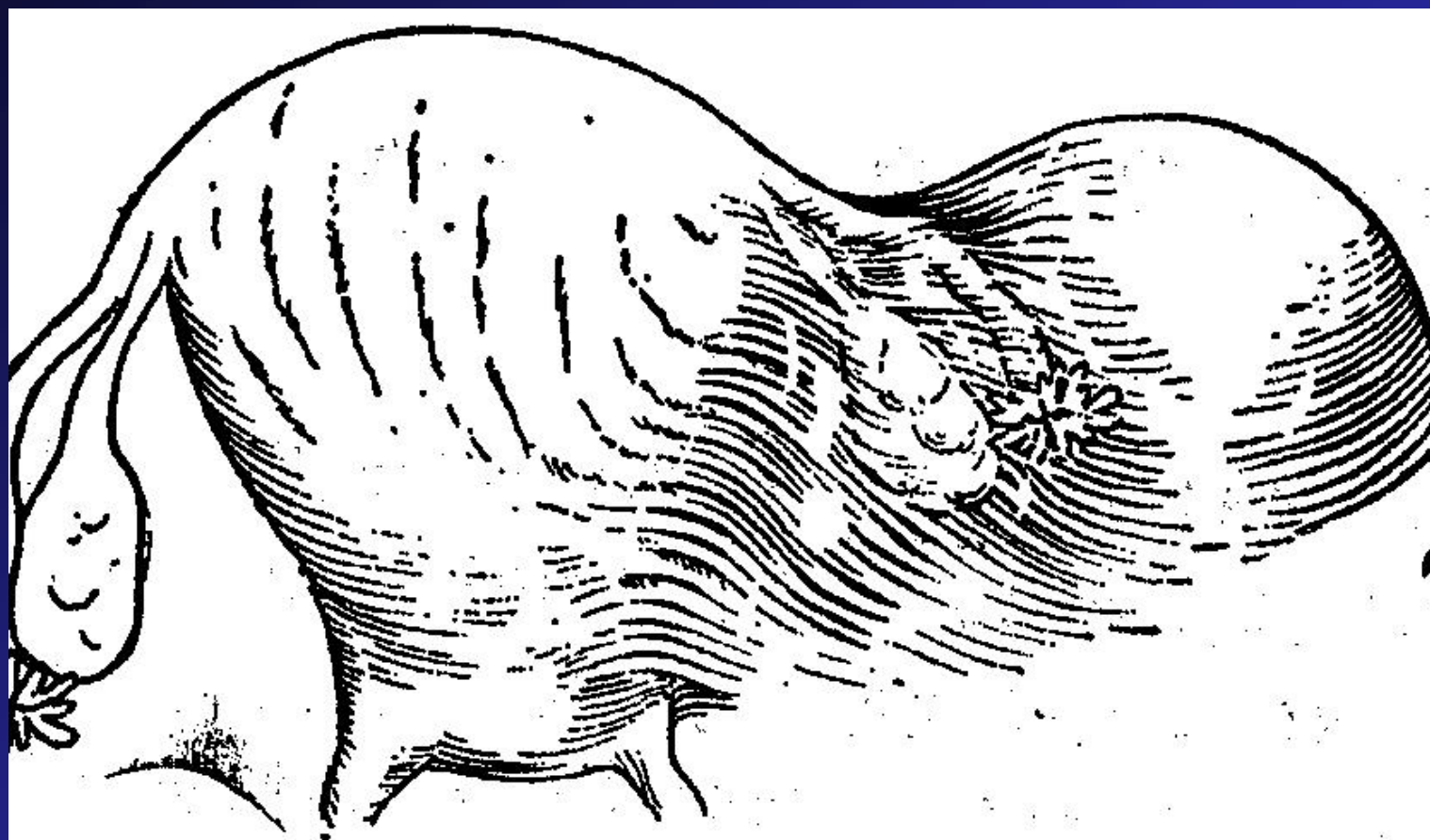
## *RUPTURE OF THE UTERUS*

**The most common  
cause of uterine  
rupture is separation  
of a previous  
cesarean section  
scar.**

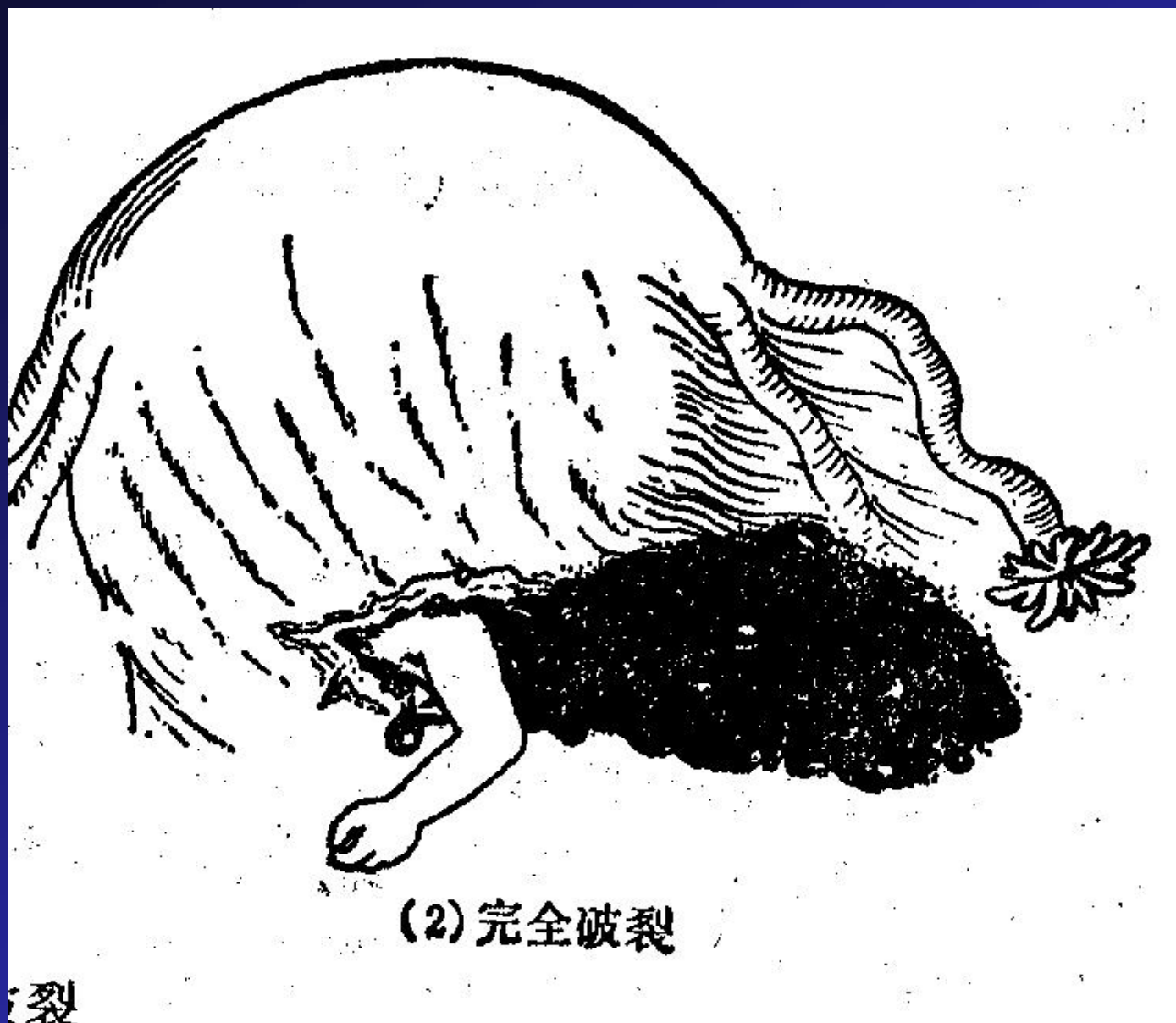
# types

- Incomplete rupture
- complete rupture
- depending on whether the peritoneal coat is torn through or not





(1) 不完全破裂



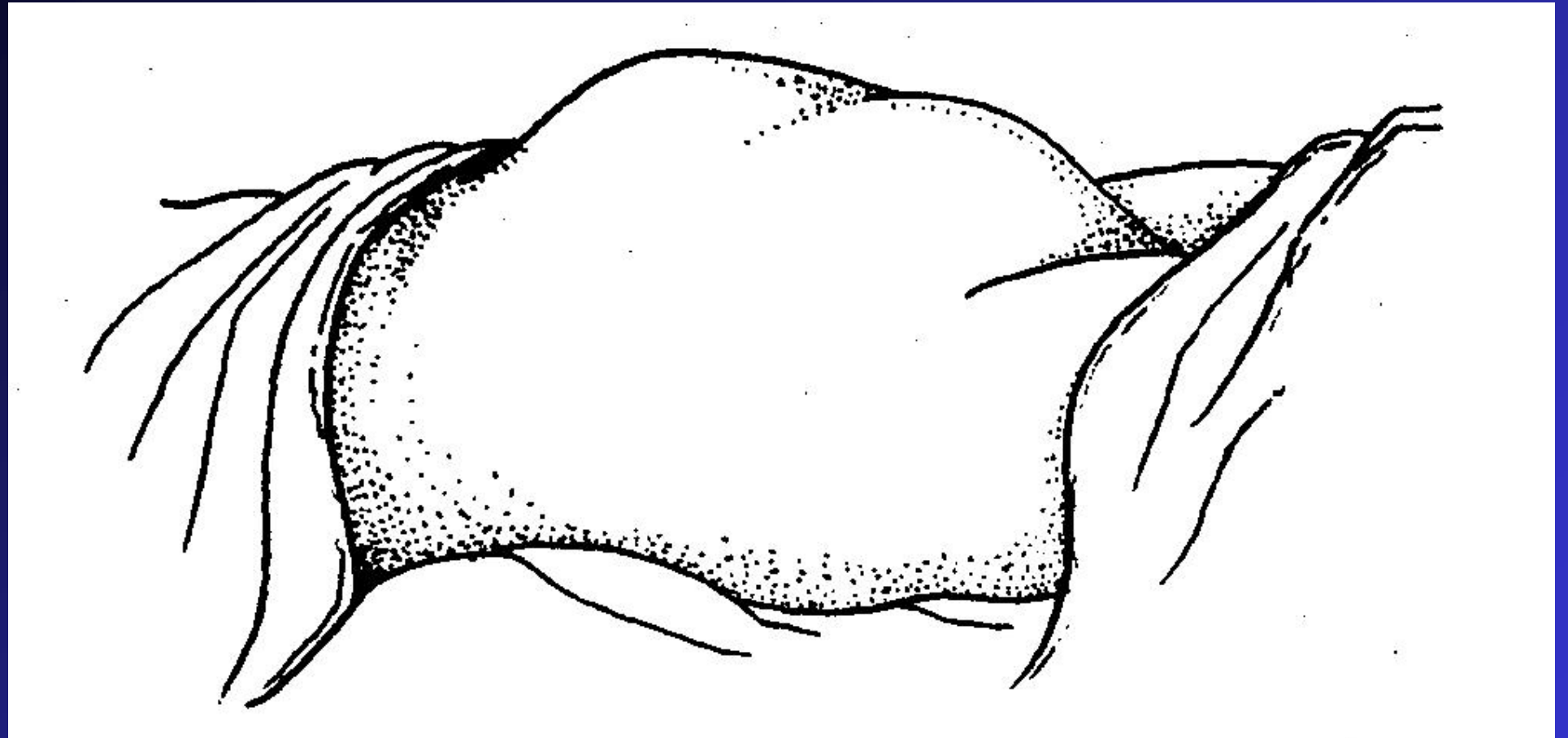
# Symptoms and signs

## 1. Rupture of scar

- be gradual that symptom is very slight in incomplete rupture
- abdominal pain wrongly attributed to the onset of labor
- severe pain and shock occurs in complete (suddenly pain)
- fetal distress
- bleeding in vagina

## 2.Spontaneous rupture during obstructed labor

- prolonged labor
- violent uterine actions,
- \*pathologic retraction ring
- disproportion, malpresentation(transverse lie)
- fetal distress
- a sharp, tearing pain in lower abdomen
- pulse rapid
- blood pressure fall
- fetus may be felt in the abdominal cavity



### 3. Rupture by oxytocin drugs:

- be follow the administration of oxytocin
- the danger is less if the drug is given as a dilute intravenous drip given in an increasing fashion

# *RUPTURE OF THE UTERUS*

## **CLINICAL FINDINGS. DIAGNOSIS**

**Impending uterine rupture** → the sudden appearance of **gross hematuria** is suggestive.

- Prior to the onset of labor, a beginning rupture may produce **local pain** and **tenderness** associated with **increased uterine irritability** and, in some cases, a small amount of **vaginal bleeding**.
- If the fetus is partly or totally extrauterine, abdominal palpation or vaginal examination → the presenting part has moved away from the pelvic inlet (**loss of station**).

## *RUPTURE OF THE UTERUS*

### **The classic SIGN & SYMPTOMS of spontaneous rupture during labor**

- **cessation of uterine contractions**
- **suprapubic pain and tenderness**
- **disappearance of fetal heart tones**
- **recession of the presenting part**
- **vaginal hemorrhage → signs and symptoms of hypovolemic shock and hemoperitoneum.**



## Prognosis

- has a high mortality
- peri-natal morbidity is high

# *RUPTURE OF THE UTERUS*

## **PREVENTION**

- **good prenatal care**
- **correct trial of labor**
- **correct supervised administration of oxytocin during labor.**
- **correct closure of a cesarean section incision**
- **correct estimation of fetal weight**

# treatment

- Women's general condition must be improved (giving morphine, blood transfusion, glucose solution)
- immediate laparotomy
- hysterectomy
- wide-spectrum antibiotics

# *RUPTURE OF THE UTERUS*

## **TREATMENT**

Whenever uterine rupture is diagnosed –

### **EMERGENCY SURGERY**

- two effective, large-bore **intravenous infusion**
- type-specific **whole blood** in large quantities is rapidly infused;
- a **surgical team**, including anesthesia personnel;
- **pediatric personnel** skilled in neonatal resuscitation.

## *RUPTURE OF THE UTERUS*

- **Immediate laparotomy**
- **Suture or Total hysterectomy**
- **If a large hematoma in the broad ligament, identification and ligation of the internal iliac arteries (reduces the hemorrhage appreciably).**
- **Prompt diagnosis, immediate operation, the availability of large amounts of blood and antimicrobial therapy have greatly improved the maternal prognosis.**