

## ➤ ABORTION

**Spontaneous abortion** = the loss of the fetus and abortion of the pregnancy due to a physiological problem, genetic abnormality of the fetus or physical trauma.

**Induced abortion** = termination of the implanted embryo by artificial measures.

About 1/3 of the world's population lives in countries with few or no abortion laws allowing abortion on request to the 24<sup>th</sup> week, usually by the 12<sup>th</sup> week. About 1/3 live in countries where abortion is not allowed by request but performed due to medical or psychological or socioeconomic problems. About 1/3 live in countries with restrictive abortion laws in which abortion is only allowed if it threatens the life of the mother.

Number of abortion in 1973 (*Roe vs. Wade*) = 616,000

Number of abortions in 1996 = 1.6 million

About 1/3 of all abortions are performed on teenagers and 3 of 4 on unmarried women. The teenage pregnancy rate is about 10%, but currently dropping.

### **Abortion Laws in the U.S.**

**Comstock Law of 1873** = made abortion illegal in the U.S.

**1967 – 1970** states started adopting laws to allow abortion to save the mother

**1973** = *Roe vs. Wade* and *Doe vs. Bolton*, legalized abortion with the following restrictions:

1. pregnancies in first trimester (12 weeks) can be performed on request after counseling.
2. second trimester abortions are restricted to cases of danger to the mother or fetal defects, varies from state to state

**1977** = Hyde Amendment (supported by Supreme court) = prohibits use of federal funds for abortion except to save the mother's life

**1980** = U.S. District Judge J.F. Dooling declared the Hyde amendment unconstitutional, but his decision was later overturned by a 5 to 4 vote in the U.S. Supreme Court

Medicaid abortions are only allowed in cases of rape, incest or when two different doctors agree that childbirth would endanger the mother

Currently, 23 states have laws that restrict access of minors to abortion (parental consent laws)

### **First Trimester Abortions**

#### ***Chemical Induced Abortions***

**Menstrual regulation** = within 2 weeks of missed period; removal of embryo and endometrium via a tube connected to a syringe.

**Prostaglandins** = given orally or by vaginal suppository; cause uterine contractions; 100% effective if less than 3 weeks; can cause nausea and diarrhea

**RU 486** = progesterone antagonist; blocks progesterone receptors; uterine endometrium breakdown and menstruation ensues

Steps

1. Counseling
2. 600 mg pill
3. return to clinic 36-48 hours later given prostaglandin pill
4. expulsion of embryo occurs in about 4 hours
5. often a return visit required to be sure abortion is complete

**Methotrexate** = chemotherapy agent that blocks cell division

5 to 7 days later, Misoprostol = stimulates uterine contractions, is administered

After both drugs are given abortion occurs within 24 hours

### ***Surgical Induced Abortions***

#### **Vacuum Aspiration = at 3 to 9 weeks**

Quicker, easier and less painful than D & C; less uterine bleeding and risk of infection; Anesthetic is injected into cervix; a tube (vacurette) is placed into the uterus and connected to a suction device and collection bottles; suction for less than 2 minutes; curettage performed if abortion is incomplete

#### **D & C (Dilatation and Curettage) = at 6 to 12 weeks**

Uterus is dilated using a laminaria tent that absorbs water and swells to 3-5 times its original size; remains in uterus for up to 24 hours; uterus and embryo are scraped out using a metal scraper (curette); paracervical or general anesthesia is required due to pain

#### **Second Trimester Induced Abortions (13<sup>th</sup> to 24<sup>th</sup> week)**

Second trimester abortions are more risky and complicated for the woman. About 100,000 second trimester abortions are performed each year in the U.S.

From weeks 12 to 15, D & C is not typically used as the uterine wall is susceptible to puncture and excessive bleeding as the placenta is highly vascular. Most doctors would recommend waiting until the 16<sup>th</sup> week.

### ***Methods***

**Intramnionic Saline** = 250ml of amniotic fluid is removed and saline is injected into the amniotic sac (through the abdominal wall) which kills the fetus and induces delivery within 24 to 48 hours. About 34% of women run the risk of a misinjection into a blood vessel causing hemorrhage or infection. Maternal death rate is about 12 to 18 per 100,000. Sometimes the fetus is born alive and dies quickly of respiratory failure.

**Prostaglandin Injections** = Most widely used second trimester method. Best if used between weeks 15 and 20. Prostaglandins are injected into the amniotic fluid. This can be administered through the cervix and does not need to be through the abdominal wall. Delivery usually occurs within about 8 hours. There are many fewer complications with this method as compared to intramnionic saline.

**Dilation and Evacuation (D & E)** = performed from the 20<sup>th</sup> week. Basically, labor is induced with hormones, but the fetus is delivered first and its brain is removed by suction while the head is still in the birth canal. This procedure is only performed when the mother's life is in danger. Only about 13,000 of the 1.5 million abortions performed in the U.S. each year are done after the 20<sup>th</sup> week. Congress passed a bill in 1995 to outlaw the D & E procedure, but it was vetoed by the President.

#### **Third Trimester Abortions (after the 24<sup>th</sup> week)**

These are extremely rare in the U.S. as the fetus could usually survive on its own.

**Hysterotomy** is usually used which is a surgical procedure done under general anesthesia and is sometimes called a mini-cesarean because it is similar to a cesarean delivery. Hospitalization lasts about 4 to 6 days. The maternal mortality rate is about 45 to 271 per 100,000 women. The most disturbing aspect is that the fetus is delivered alive and must be left to die (sometimes after several hours) of respiratory failure.

Statistically, abortion usually has little or no effect on a woman's future fertility unless there are complications.