Clinical Interruption of Pregnancy (Medical/Surgical Abortion)

Approximately one fifth of all pregnancies in the United States end in abortion (Ventura et al., 2009). According to the CDC (2011a), there were more than 800,000 legal abortions performed in the United States in 2007, the latest year for which complete data analysis was available. Most abortions (more than 90%) were performed in the first trimester, two thirds of those before the 13th week of pregnancy. Less than 2% were performed later than 21 weeks’ gestation. Abortion rates were highest among women ages 20–29 (29.4 per 1,000 women).

Most abortions are performed because of an unintended pregnancy. However, an estimated 4% of abortions result from intended pregnancy. Presumably, those abortions are performed because of maternal medical indications and/or fetal abnormalities (Finer & Henshaw, 2006).

The average cost of a nonhospital abortion performed at 10 weeks gestation ranges from $350 to $900. Performed at 20 weeks, the average cost more than doubles. In-hospital late-term abortions may cost as much as $7,500.

DECIDING TO HAVE AN ABORTION

For most women of any age, the decision to terminate a pregnancy is seldom made lightly. Each woman has her own reasons, based on her age, relationship status, economic status, and cultural and spiritual beliefs. The most important reasons given include:

- Concern for/responsibility to other individuals (74%)
- Cannot afford a baby now (73%)
- A baby would interfere with school/employment/ability to care for dependents (69%)
- Would be a single parent/having relationship problems (48%)
- Has completed childbearing (38%)
  
(Finer et al., 2005)

Most women who choose to have an abortion understand what it means to be a parent; a majority already have children. According to the Guttmacher Institute (2011d), each year 10,000–15,000 abortions are performed because the pregnancies resulted from rape or incest.

TYPES OF ABORTION

Abortion procedures can be either medical or surgical, depending on the gestational stage and the preferences of the patient and the physician. Medical abortion, sometimes called therapeutic abortion, has been available in the United States since 2000, when the FDA approved mifepristone
Medical abortion is an option during the first 9 weeks after a woman’s last menstrual period (LMP) and does not require hospitalization.

Surgical abortion may be used in either the first or second trimester and includes three different types of procedures. During the first 16 weeks, the most commonly used procedure is vacuum curettage (vacuum aspiration), which can be performed in a clinic or hospital. Some surgeons prefer to use dilation and curettage (D&C) during the first trimester. The procedure for second-trimester abortion is called dilation and evacuation (D&E) and is usually done in a hospital, sometimes under general anesthesia.

Legalized abortion is one of the safest types of medical/surgical procedures. The risk of serious complications from a first-trimester surgical abortion is less than the risk of complications from pregnancy and childbirth. For example, the risk of death from surgical abortion is 1 in 160,000 cases. The risk of death from medical abortion is even less than death related to surgical abortion (Grimes, 2005). The risk of death from complications of pregnancy and childbirth in the United States is 11 in 100,000 (Hogan et al., 2010).

**Medical Abortion**

Medical abortion can be performed as soon as pregnancy and gestational stage can be confirmed. Medical abortion involves taking two medications, either mifepristone (“the Abortion pill”) or methotrexate, followed by misoprostol. Methotrexate is seldom used in the United States because mifepristone is somewhat more effective and works more quickly than methotrexate. Methotrexate is given as an injection. The earlier the procedure is done, the more effective the medications will be.

Mifepristone and methotrexate work by blocking progesterone, which is necessary to sustain pregnancy. In the absence of progesterone, the uterine lining breaks down, the cervix softens, and bleeding begins. A few days after taking the first drug, the second drug is taken by swallowing or placing it either in buccal area (between the cheek and the gum) or in the vagina. (The Planned Parenthood protocol uses the buccal area rather than the vagina.) This second drug terminates the pregnancy.

Medical abortion takes longer than surgical abortion: from a day up to 3–4 weeks from the time a woman takes the first medication until all the products of conception are expelled. Mifepristone works more quickly than methotrexate. More than 90% of women who take mifepristone will abort within one week after taking misoprostol, more than half of them during the first 4 hours.
Patients who choose medical abortion should be counselled and provided with written information about the following:

- Vaginal bleeding may begin after taking the first drug. It may be light or like a heavy period.
- Cramping and bleeding usually begin within a few hours after taking misoprostol.
- Early side effects may also include headache, nausea, vomiting, diarrhea, fever, chills, or fatigue.
- Flu-like symptoms or abdominal pain more than 24 hours after using misoprostol are signals to call the clinic.
- The expulsion of the embryo and other products of conception probably will occur at home. This could include blood clots and possibly the amniotic membrane. However, at 49 days LMP, the embryo will be about one fifth of an inch long.
- Once the products of conception have been expelled, cramps and bleeding lessen. However, bleeding may continue for 1 or 2 weeks.
- The first menstrual period after medical abortion may be heavier or longer than normal, but by the second period after medical abortion, the cycle should return to normal.

**Complications** of medical abortion are rare (occurring in 2% to 5% of cases) but may include:

- Heavy and prolonged bleeding that may require suction aspiration and, rarely, a transfusion
- Missed or incomplete abortion, which requires a suction procedure to ensure that no products of conception remain in the uterus
- Clostridial toxic shock syndrome, which is extremely rare (8 deaths have been reported between 2000 and 2007 out of more than a million cases of medical abortion); as a result, most clinicians use the buccal route to administer misoprostol rather than the vaginal route and add routine prophylactic antibiotics to reduce the risk of infection (Meites et al., 2010)

**Surgical Abortion**

**Vacuum aspiration (vacuum curettage)** abortion is the most common kind of in-clinic abortion, used up to 16 weeks after a woman’s LMP. Prior to the procedure, the clinician will order tests, which may include an ultrasound, and examine the patient. The actual aspiration procedure takes 5 to 10 minutes, but additional time is required to counsel the patient, dilate the cervix, and administer pain medication and antibiotics. Some clinics also offer sedation.
Some clinicians place osmotic dilators in the cervix the day before or several hours before the aspiration. Osmotic dilators include laminaria (a small tube made of dried seaweed) or a synthetic dilator (a manufactured sterile sponge). As the dilator absorbs body fluids, it enlarges and thereby stretches the cervix. Medication may also be used to help soften and dilate the cervix. After inserting a tube through the cervix into the uterus, the clinician uses either a handheld suction device or a suction machine to gently aspirate the pregnancy tissue.

If additional tissue remains in the uterus after aspiration, a curette is used to determine that the uterus is empty. When a curette is used, the procedure is called dilation and curettage (D&C). The D&C procedure is also used for conditions other than abortion. For example, D&C is used in diagnosing uterine cancer, causes of dysfunctional bleeding, or infertility as well as to stop heavy bleeding or remove uterine polyps.

**COUNSELLING PATIENTS**

Patients undergoing vacuum aspiration abortion should be counseled and provided written information on the following:

- Pain similar to menstrual cramps is common.
- Bleeding is normal after an abortion, including clots about the size of a quarter. It is also normal to have:
  - Spotting that lasts up to six weeks
  - Heavy bleeding for a few days
  - Intermittent bleeding
- Either pads or tampons may be used, but using pads makes it easier to monitor your bleeding.
- It's also normal to have no bleeding after an abortion.

**Dilation and evacuation (D&E)** abortion is usually performed during the second trimester of pregnancy and generally includes a combination of vacuum aspiration, D&C, and the use of surgical instruments such as forceps. It usually takes 10 to 20 minutes. D&E is usually done in a hospital but does not require an overnight stay. It can also be performed in a clinic by practitioners specially trained to perform abortion.

D&E is always preceded by an ultrasound examination to determine the size of the uterus and the number of weeks of the pregnancy. Most clinicians place an osmotic dilator in the cervix 24 hours before the D&E, and some also administer misoprostol to help soften the cervix. These measures reduce the risk of injury to the cervix during the procedure. Second trimester abortion requires more cervical dilation than required for a vacuum aspiration in early pregnancy.
Preoperative preparation also includes the administration of antibiotics to reduce the risk of infection.

The clinician administers local anesthesia in the cervical area (paracervical block) as well as a sedative. If the procedure is done in a hospital operating room, some clinicians will use spinal anesthesia or general anesthesia. However, general anesthesia carries its own risks and increases hospitalization and recovery time.

Suction aspiration is used first, followed by insertion of forceps to grasp larger pieces of tissue. Finally, a curette is used to gently scrape the endometrium and remove any remaining tissue. Additional suction is used to ensure that the uterine contents are completely removed. The clinician may also use ultrasound during the D&E procedure to confirm that all tissue has been removed and the abortion is complete.

Additional antibiotics are prescribed to prevent infection.

Possible complications of D&E include infection and, rarely, uterine perforation, uterine rupture, moderate to severe hemorrhage due to retained pregnancy tissue, or blood clots in the uterus.

**COUNSELING PATIENTS**

Patients undergoing dilation and evacuation abortion should be counseled and provided written information on the following:

- For the first week after the D&E, avoid tampons and use only pads.
- Cramps similar to menstrual cramps may last from several hours to a few days. Use acetaminophen (such as Tylenol) or ibuprofen (such as Advil) to relieve pain.
- Do not have intercourse for at least 1 week, or longer, as advised by the clinician.
- Use birth control when you are having sexual intercourse and use condoms to prevent infection. An IUD affords immediate contraceptive protection as soon as it is placed in the uterus.
- Call us immediately if any of these symptoms occur:
  - Severe bleeding, which includes:
    - Passing clots bigger than a golf ball, lasting 2 hours or more
    - Soaking more than 2 large pads in an hour, for 2 hours in a row
    - Bleeding heavily for 12 consecutive hours
  - Signs of infection throughout your body (headache, muscle aches, dizziness, or a general malaise). Infection does not always cause fever.
  - Severe abdominal pain unresponsive to medication, rest, or heat
• Call your doctor for an appointment if any of these symptoms occur after a recent abortion:
  o Bleeding (not spotting) for longer than 2 weeks
  o New unexplained symptoms
  o No menstrual period within 6 weeks after the procedure
  o Signs and symptoms of depression, caused by hormonal changes after a pregnancy