Health Education Related to Selected Gynecological Problems

☆ Cesarean Birth:

J. Indication for Cesarean Birth:

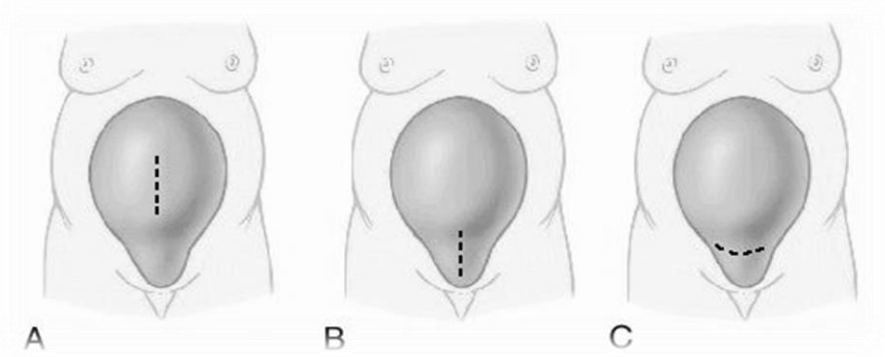
Cesarean birth is indicated in the following conditions:

1. Previous cesarean birth
2. Fetal distress
3. Uncontrollable third-trimester bleeding
4. Placenta previa
5. Abruptio placentae
6. Fetopelvic disproportion
7. Fetal mal presentation
8. Prolapsed cord
9. Medical complications of pregnancy, such as maternal heart disorder
10. Failure of labor to progress
11. History of herpes simplex virus infection
12. Post maturity (with failed induction)

K. Types of Cesarean Birth:

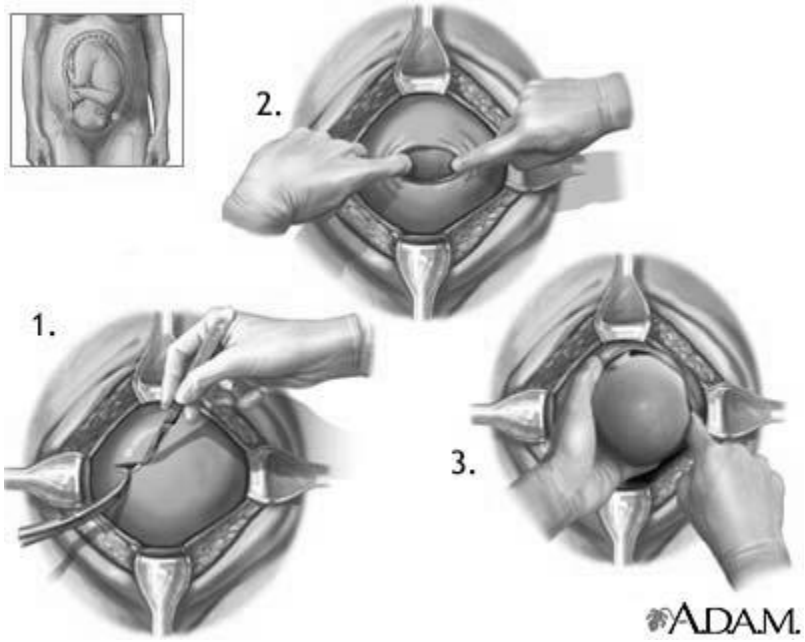
There are three types of cesarean births:

1. *Classic Cesarean Birth:*



2. *Transverse Incision:*

This is the most common type of cesarean birth, where a transverse incision is made in the lower segment of the uterus.



i. *Advantage:*

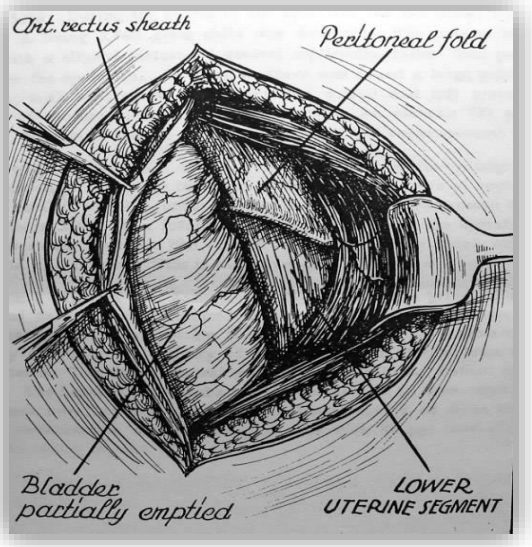
The advantages of a transverse lower segment incision are easier repair, less blood loss, lower incidence of infection, and less risk of subsequent rupture.

ii. *Disadvantage:*

These are that it takes more time and requires more surgical skills.

3. *The extra peritoneal cesarean birth:*

   Is less frequently seen, and requires great surgical skills to avoid nicking the bladder



L. *Discharge Teaching:*

Discharge teaching includes information about:

1. Diet
2. Exercise
3. Activity restriction
4. Breast care
5. Sexual activity
6. Contraception
7. Medications
8. Signs of complications
9. Abdominal binder

- *Signs of postoperative complications after discharge:*

  The following signs should be reported to the health care provider:

  1. Fever greater than 100.4˚ (38˚C)
  2. Painful urination
  3. Lochia heavier than a normal menstrual period
  4. Wound separation
  5. Redness or oozing at the incision site
  6. Severe abdominal pain

M. *Instructions after cesarean birth:*

1. *Diet:*
   i. *Increase protein and vitamin C intake*; to help healing process.

ii. *Increase iron intake;* to replace blood loss.
iii. *Increase fibers;* to avoid constipation & complication of uterine prolepses.
iv. *Increase fluid (10-12 cups)*
v. *Decrease spicy food, food containing gases and caffeine (tea, coffee, chocolate…etc.):* as it comes down with breast-feeding and causes problems to the newborn (gases, colic, rashes…etc.).

2. *Exercise:*
   i. Breathing and feet exercise immediately.
   ii. Breast exercise and Kegels' exercise immediately.
   iii. Abdominal exercise after 4 weeks
3. *Activity:*

   Avoid pushing, pulling, any object, and going out for shopping.
4. *Use abdominal binder for at least 6 months*
5. *Observe site of operation.*
6. *Contraception:*
   i. If not breast feeding start O.C.P. after 21 days
   ii. If the patient is breast-feeding, then she can use local method.
   iii. I.U.D. should not be used before three months after birth.
7. *Follow up:*

   After 3-6 weeks
8. *Breast feeding:*

   Lateral Sims, football hold
9. *Showering:*

   Cover the site of operation with a plastic cover to prevent contamination of wound.

☆ Post Abortion Health Education:

1. Normal physical activity maybe resumed as soon as you feel ready.
2. You may be given some medication (Methergine). You may experience some uterine cramping with or without the medication. Some physicians also prescribe antibiotics as an added precaution against infection.

3. Because of the risk of infection, it is important not to have intercourse or to insert anything in the vagina for 2-3 weeks. Other forms of orgasm will not be harmful to your body. Do not douche or use tampons for 2-3 weeks after the procedure, or until you stop bleeding.
4. Bleeding will probably cease after 3-4 days, but may last for up to 3 weeks. There may be no bleeding at all. If bleeding exceeds two sanitary pads an hour or if you have a fever, call your health care provider or the facility where the procedure was performed.
5. Menstruation (period) should resume in 4-6 weeks (but maybe in 8).
6. You will be given a follow-up appointment with your nurse practitioner within the week following the abortion when you will have a chance to discuss your feelings now that you have had an abortion. This will also give you a chance to finalize your decision about what form of contraception you would like to use.

☆ Vaginal Infection:

A. Prevention:

1. Cleanliness & personal hygiene are very important. Keep clean by bathing with soap and water. Vaginal deodorants can be irritating and are worthless in treating.
2. Douching is never recommended. The douche solution removes the natural cleansing sections of the vagina.
3. Avoid all use of feminine hygiene sprays and deodorants as well as deodorant or scented tampons, pads and panty liner since these products tend to alter the natural environment of the vagina and render it more susceptible to irritation and/or infection.
4. To prevent both vaginal & bladder infections from occurring wear cotton underwear and no underwear while sleeping. Wipe yourself from front to back after going to the bathroom; urinate after intercourse, drink lots of fluids, at least 6 glasses of water a day; cranberry juice may be helpful to avoid infection.

B. Rules to follow if you have a vaginal infection:

1. Bed rest, light diet, and increase the fluid intake.
2. Good perineal hygiene
3. Sustain contraceptive or use condom by husband.

4. Prevent flow of infection.
5. Do not use tampons for protection.
6. If treating an infection with vaginal cream, or suppositories, remain lying down in bed for at least 15 minutes, to allow the medication to spread deeply around the cervix.
7. Sexual intercourse should be avoided for at least one week, and preferably throughout the entire course of treatment.
8. Insufficient lubrication prior to intercourse may contribute significantly to vaginal infection, and bladder infection.
9. *Local treatment or application:*
    i. Vaginal douches to wash out the discharge, teach the woman how to use it.
    ii. Types of usually used douches:
        - *Alkaline solution*
        - *Acidic solution*
        - *Hydrogen peroxide*
        - *Powder containing boric acids and Menthol*

☆ **Dyspareunia:**

It is difficult or painful sexual intercourse "coitus". It could be superficial or deep.

☙ *Treatment:*

It is essential to treat the cause.

Research activity
Infertility

Female and male factor infertility

Female factors that affect fertility include the following categories:

- Cervical: Stenosis or abnormalities of the mucus-sperm interaction
- Uterine: Congenital or acquired defects; may affect endometrium or myometrium; may be associated with primary infertility or with pregnancy wastage and premature delivery

- Ovarian: Alteration in the frequency and duration of the menstrual cycle—Failure to ovulate is the most common infertility problem
- Tubal: Abnormalities or damage to the fallopian tube; may be congenital or acquired
- Peritoneal: Anatomic defects or physiologic dysfunctions (eg, infection, adhesions, adnexal masses)

Male factors that affect fertility include the following categories:

- Pretesticular: Congenital or acquired diseases of the hypothalamus, pituitary, or peripheral organs that alter the hypothalamic-pituitary axis
- Testicular: Genetic or nongenetic
- Posttesticular: Congenital or acquired factors that disrupt normal transport of sperm through the ductal system

Factors that affect the fertility of both sexes include the following:

- Environmental/occupational factors
- Toxic effects related to tobacco, marijuana, or other drugs
- Excessive exercise
- Inadequate diet associated with extreme weight loss or gain
- Advanced age

Evaluation of infertility

Infertility is a problem that involves both partners. Diagnostic testing is unnecessary if the couple has not attempted to conceive for at least 1 year, unless the woman is age 35 years or older, or if they have a history of a male factor infertility, endometriosis, a tubal factor, diethylstilbestrol (DES) exposure, pelvic inflammatory disease, or pelvic surgery. A complete infertility evaluation is performed according to the woman's menstrual cycle and may take up to 2 menstrual cycles before the etiology is determined.

Obtain the following medical history and information from the couple:

- Copy of previous medical records
- Completed medical history questionnaire
- Details regarding the type of infertility (primary or secondary) and its duration
- History of previous pregnancies and their outcomes; pregnancy intervals; and detailed information about pregnancy loss, pregnancy duration, human chorionic gonadotropin (hCG) level, ultrasonographic data, and presence/absence of fetal heartbeat
- History of previous infertility evaluation/treatment, including details about frequency of intercourse, use of lubricants (eg, K-Y gel) that could be spermicidal, use of vaginal douches after intercourse, and presence of any sexual dysfunction
- Female menstrual history, frequency, and patterns since menarche, as well as history of weight changes, hirsutism, frontal balding, and acne
- Male medical history, including previous semen analysis results, history of impotence, premature ejaculation, change in libido, history of testicular trauma, previous

relationships, history of any previous pregnancy in female partners, and the existence of offspring from previous female partners
- Couple's history of sexually transmitted diseases (STDs); surgical contraception (eg, vasectomy, tubal ligation); lifestyle; consumption of alcohol, tobacco, and recreational drugs (amount and frequency); occupation; and physical activities
- Couple's current medical treatment (if any), reason, and any history of allergies
- Complete review of systems to identify any endocrinologic or immunologic issue that may be associated with infertility

Examination for infertility should include the following:

- Routine records of blood pressure, pulse rate, and temperature (if applicable)
- Height/weight findings to calculate body mass index; measure arm span when indicated
- Head and neck assessment: (1) The presence of exophthalmos can be associated with hyperthyroidism; (2) the presence of epicanthus, lower implantation of ears and hairline, and webbed neck can be associated with chromosomal abnormalities; (3) exclude thyroid gland enlargement/nodules, which may indicate thyroid dysfunction
- Breast evaluation: Assess breast development and seek any abnormal masses or secretions, especially galactorrhea
- Abdominal evaluation: Assess for presence of abnormal masses at hypogastrium level
- Thorough gynecologic evaluation: Assess for hair distribution, clitoris size, Bartholin glands, labia majora/minora, and any condylomata acuminatum or other lesions that could indicate the existence of venereal disease
- Speculum examination: Obtain a Papanicolaou test and cultures for gonorrhea, chlamydia, *Ureaplasma urealyticum, Mycoplasma hominis*; assess for cervical stenosis
- Bimanual examination: Establish direction of the cervix plus size/position of the uterus to exclude the presence of uterine fibroids, adnexal masses, tenderness, or pelvic nodules indicative of infection or endometriosis; assess for defects (eg, absence of vagina and uterus, vaginal septum)
- Extremities evaluation: Exclude malformation (eg, shortness of fourth finger, cubitus valgus), which can indicate chromosomal abnormalities and other congenital defects
- Dermatologic evaluation: Assess for the presence of acne, hypertrichosis, and hirsutism

The urologist usually examines the male partner if the patient's history of his semen analysis produces an abnormal finding. Attention should be directed to the following:

- Congenital abnormalities of the genital tract (eg, hypospadias, cryptorchid, congenital absence of the vas deferens)
- Testicular size, urethral stenosis, and presence of any varicocele
- Any previous inguinal hernia repair: Can indicate accidental ligation of spermatic artery

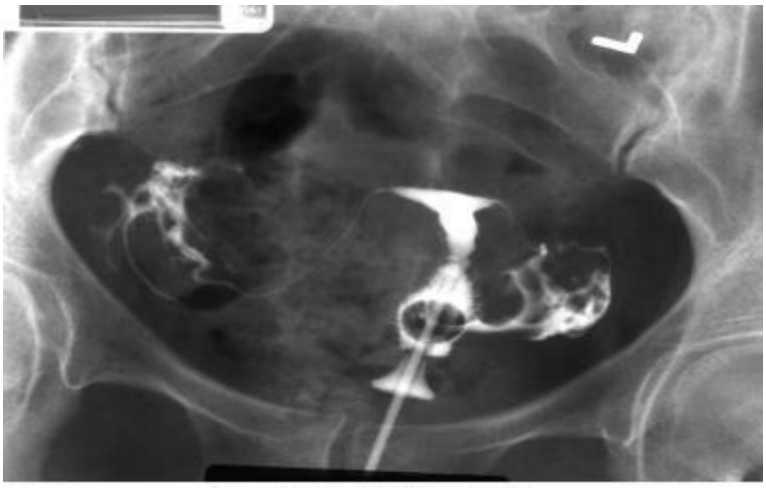
Laboratory, imaging, and/or surgical evaluation

Laboratory, radiologic, and/or surgical assessment of the female includes the following areas:

- Cervical: Postcoital test or Sims-Huhner test [2, 3, 4, 5]; no longer routine in standard infertility workup
- Uterine and endometrial: Hysterosalpingogram—most frequently used diagnostic tool to assess endometrial cavity (see the image below); pelvic ultrasonograms; saline infusion sonograms; pelvic magnetic resonance imaging; hysteroscopy; endometrial biopsy
- Tubal and peritoneal: Laparoscopy and hysterosalpingogram
- Ovarian: Progesterone levels and/or serial ultrasonography to assess ovulation; follicle-stimulating hormone and estradiol levels (or antral follicle counts, ovarian volume, inhibin B level, and antimüllerian hormone level) to assess ovarian reserve; clomiphene citrate challenge test for dynamic ovarian reserve testing

Laboratory evaluation of the male partner includes the following:

- Semen analysis: Volume, pH level, concentration, motility, morphology, WBC count
- Sperm function tests: (1) The acrosome reaction test with fluorescent lectins or antibodies, (2) computer assessment of the sperm head, (3) computer motility assessment, (4) hemizona-binding assay, (5) hamster penetration test, and (6) human sperm-zona penetration assay



Normal HSG with Bilateral Spillage

Infertility. Hysterosalpingogram image demonstrating normal findings with bilateral spillage. Image courtesy of Jairo E. Garcia, MD.

Treatment of infertility

Treatment plans are based on the diagnosis, duration of infertility, and the woman's age. Management of any underlying female and/or male factors affecting fertility may include medical treatment (eg, pharmacotherapy), surgical intervention, or both.

Assisted Reproductive Technologies

Assisted reproductive technologies used to treat infertility include the following:

- In vitro fertilization (IVF)
- Gamete intrafallopian transfer (GIFT)
- Zygote intrafallopian transfer ZIFT)
- Intracytoplasmic sperm injection (ICSI)
- Intrauterine insemination (IUI)
- Sperm, oocyte, or embryo cryopreservation

Assisted fertilization techniques used clinically include ICSI and assisted hatching.

Alternative treatment plans

If pregnancy has not been established within a reasonable time, consider further evaluation and/or an alternative treatment plan, such as use of donor oocyte, sperm, or embryo, or the use of a gestational carrier or surrogate mother.