**Termination of pregnancy**

**Overview**

Abortion in general is defined as expulsion of the fetus and product of gestation before 24 weeks of gestation. Despite abortion is one of the most devastating psychological conditions affecting any woman life yet there are other conditions in which on purpose we deliberately terminate pregnancy before 24 weeks of gestation. Those conditions are summarized bellow;

1. When chorionic villous sampling done in the first trimester shows fetal abnormality. The fetal abnormality which can be detected in this procedure is either single gene mutation like sickle cell anemia or chromosomal abnormality like trisomy 21.
2. When the screening triple test conducted in the second trimester shows evidence of fetal neural tube abnormality like anencephaly. The triple test consists of measuring maternal serum alpha feto protein, serum HCG and serum and serum estriol. The neural tube defect abnormality should be further diagnosed further by detailed ultrasound scan which should confirm the diagnosis.
3. When amniocentesis done in the second trimester for fibroblast of fetal origin swimming in the fluid shows evidence of single gene mutation by polymerase chain reaction or chromosomal abnormality. In such cases termination of pregnancy may be offered to the women.
4. When cordocentesis done early in the second trimester for fetal white blood cells analysis shows fetal abnormality. In this procedure a sample of fetal blood is taken for chromosomal abnormalities or single gene mutation by polymerase chain reaction for fetal white blood cells.
5. When some maternal medical condition coexists with the start of pregnancy in which pregnancy adversely affect women life. The most common conditions are diabetic retinopathy and Eisenmenger complex in the presence of untreated long standing ventricular septal defect.
6. In countries where the Abortion Act is valid and supported by the government. According to this law any pregnant women irrespective of her age or marital status can consult a pregnancy termination clinic and termination of pregnancy is offered to the mother irrespective of te fetal condition.

***Medical methods of pregnancy termination***

The most commonly used drugs to terminate pregnancy are the followings 2 drugs;

1. Mifepristone or RU 486 which is simply anti progesterone works at the level of the uterus. Mifepristone was invented in France in 1994 and becomes rapidly one of the most commonly used drugs to terminate pregnancy. It is supplied in the form of tablet containing 200 mg per one dose. Usually one tablet is given in the first day which can be repeated after 24 and 48 hours. Termination of pregnancy is usually commenced by the onset of vaginal bleeding which proceeds rapidly to complete expulsion of the fetus with other product of gestation including the amniotic sac and primitive placenta. It is most effective up to 7- 10 weeks of gestation and thereafter its efficiency is reduced. In some cases concomitant administration of methotrexate is conducted to kill the fetus and to accelerate the expulsion of the aborts.
2. Misoprotol which is simply a drug used to treat peptic ulcer by blocking histamine 2 receptor. It is classified as synthetic prostaglandin and available in the form of 200 ug tablet. The drug is most commonly used from 10 weeks of gestation till 24 weeks. It can be given orally 2-3 times daily depending on the response of the mother or vaginally in divided doses applied to to posterior fornix 3 times daily in increasing dose. In addition it can be given as a single tablet for slow absorption either sub lingual or sub check routes. The dose depends on the maternal response which presents as colicky severe pain due to the onset of uterine contraction. Abortion usually follows 2-3 days after starting the drug.

***Surgical methods of pregnancy termination***

Suction curettage was and still one of the most reliable and commonly used methods for rapid and complete termination of pregnancy. It can be used safely up to 14- 16 weeks of gestation. Thereafter the method is associated with increased hazard of perforation of the uterus and should be avoided. In this method is put in lithotomy position and given general anesthesia. Hegar’s dilators are used to gradually open the internal os up to 10 mm. Thereafter a vacuum tube is inserted into the uterine cavity which rapidly aspirated from the uterine cavity. The method is rapid and highly effective. However it is only legally available in countries where the Abortion Act is available.

***Drug which are given following termination of pregnancy***

**Antibiotics**

Antibiotic in the oral form like ampicillin or cephalosporins are usually given orally for short period over 3-7 days. The aim is to prevent the development of acute pelvic inflammatory disease. Amoxycillin and cephalexin are commonly used in 250 mg 3 times daily.

**Ergometrine**

Which is classified as one of the ergot alkaloid which is extracted from some herb plants? Erometrine is a strong oxytocix drug and usually given to prevent or reduce post abortion bleeding. The dose is 0.5 mg 3 times daily for 2-3 days. It should be avoided among women with hypertension and heart disease.

***Complications of pregnancy termination***

The most common complications following termination of pregnancy include the followings

1. Bleeding
2. Acute pelvic inflammatory disease
3. Perforation of the uterus after surgical termination of pregnancy.
4. Tubal blockage which terminates in infertility may be the result of development of acute pelvic inflammatory disease. Tubal blockage usually takes many years to develop after pregnancy termination.
5. Maternal depression commonly follows termination of pregnancy.
6. Maternal death rarely follows termination of pregnancy nowadays. The most common causes include severe bleeding and peritonitis following the development of acute pelvic inflammatory disease.