Medicine for Managers

Dr Paul Lambden BSc MB BS BDS FDSRCSEng MRCS LRCP DRCOG MHSM FRSH

Abortion

An abortion (or termination) is a medical process whereby a pregnancy is ended. These days it may be undertaken medically or surgically, although the choice does depend on the stage (number of weeks pregnant) that the patient is. In the UK the decision to abort is a complex interaction between issues of health, personal circumstances, genetics and emotion. It has a long history.

Abortion has been a source of controversy and debate for thousands of years. In general terms the ancient Greeks and the Romans were not too concerned about protecting the unborn child and the issue was about the feelings and attitudes of the father.

Plato, in his writing *Theaetetus,* mentions the ability of a midwife to induce an abortion in early pregnancy. It is widely reported that the Greeks used the herb ***silphium*** as both an abortifacient and a contraceptive. Pliny the elder referred to a potion of ***common rue***, mixed with egg and dill as an abortifacient. Gelen described as effective another drug called ***birthwort***. Hippocrates advised that a pregnancy could be aborted by the woman jumping up and down, touching the buttocks with the heels at each leap.

Hippocrates was not great on some aspects of gynaecology having advised that pregnancy was best avoided by staying in the bedroom to avoid draughts.

However, other writings, attributed to Hippocrates, describe instruments similar to a cervical dilator and a curette. The Hippocratic Oath was said to forbid the use of pessaries to induce abortion. This view was detailed by Scribonius Largus, a Roman scholar. Other scholars, however, suggest that the purpose of the Oath was simply to protect patients from surgery, which was far more dangerous than the use of medicines by physicians.

Other prominent Greeks, such as Soranus, and Romans, such as Tertullian and Celsus also wrote in detail about abortion and, in the case of Celsus, he described the management of foetal death.

The Bible comments on abortion but in terms of loss of property rather than of sanctity of life.

Through much of Western history abortion was not a crime if carried out before quickening (feeling foetal movements after 18-20 weeks). Such was the case with English Common Law. In 1803 English Statute made abortion after quickening a crime punishable by death, but in 1837 the Law abolished the significance of quickening and abandoned the death penalty for abortion.

In about 1924 English Law was amended to prevent abortion being a crime if

done in good faith for preserving the life of the mother.

In 1938, the landmark case of R v Bourne was decided in favour of an abortion performed on a 14-year old girl who had been raped. The rationale was that the girl's mental health would have suffered, had she given birth. The doctor was therefore operating to preserve the life of the mother.

In 1967, The Abortion Act legalised abortion in England to enable doctors to undertake the operation where two other doctors agreed that continuation of the pregnancy would involve risk to the life of the pregnant woman, or injury to the physical or mental health of the pregnant woman or to any existing children of her family, greater than if the pregnancy were terminated ***or*** if there was a substantial risk that if the child were born it would suffer from such physical or mental abnormalities as to be seriously handicapped.

There were also two emergency grounds; namely to save the life of the pregnant woman or to prevent grave permanent injury to the physical or mental health of the pregnant woman.

Although it is said that the 1967 Act gave women the right in Britain to have an abortion, in fact it actually didn't do so. Abortion remains a crime under the earlier law and the 1967 provides a defence for those who carry out an abortion under appropriate conditions.

An abortion is not the same as a miscarriage. A miscarriage is a pregnancy that ends naturally, normally because of a foetal abnormality which is incompatible with life or a placental disorder which prevents adequate nutritional support for the developing foetus. In most cases, following a miscarriage the loss is spontaneous although medical or surgical intervention may be required to remove any remaining products of conception.

So, a woman may seek an abortion because of personal circumstances, including the wellbeing of existing children, for health reasons or because the child may have a serious abnormality.

The provisions of the 1967 Abortion Act apply in England, Scotland and Wales, but not in Northern Ireland.

It allows termination of pregnancy during the first twenty-four weeks of the pregnancy subject to it being carried out in a hospital or licensed clinic and with the certification of two doctors that the procedure would cause less damage to the mother's physical or mental health than continuing with the pregnancy.

An abortion should be carried out as early in the pregnancy as possible and ideally before twelve weeks. Around 80% are carried out before 10 weeks, 90% before 13 weeks and about 98% before twenty weeks. The most common age for abortion is 22 and 98% are funded by the NHS. In 2013 over 185,000 abortions were carried out in England and Wales.

The discovery of a pregnancy is a life-changing situation and the decision about having an abortion may be extremely difficult. It is essential that the prospective mother has the opportunity to discuss and consider all the consequences of undergoing the procedure and she should have discussions which should include some or all of healthcare professionals, the partner, family and friends.

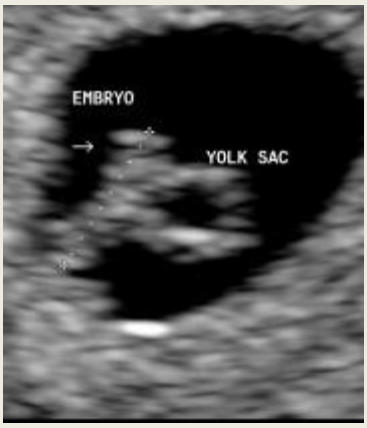
It is important
that the decision is based on the true wishes of the mother rather than as a result of pressure from any source, and the mother should consider both aborting the pregnancy and keeping the pregnancy either to expand her family or, rarely, for adoption.

Carrying out an Abortion
The whole procedure for abortion has changed since the 1960s. These days earlier abortions are done medically rather than surgically and they are carried out more sensitively than they used to be. Nowadays, they are generally done as a day case and an overnight stay is no longer required.

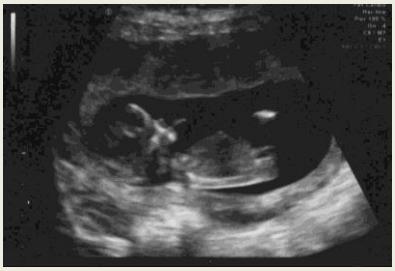
Before treatment counselling forms a vital part. It involves discussion about the nature and type of abortion, how it will be done, risks and complications and, of course, confirmation that the treatment is the right one for the patient given all the information provided. The technique to be employed will also be explained in detail. Medical history will also be checked and routine tests of blood pressure and urinalysis performed.

The patient will also be tested for sexually transmitted diseases and, if found will be treated to eliminate the disease and to ensure that infection does not occur following the operation.

Before the procedure is undertaken it may be necessary to have an ultrasound scan.



The image above is of a very early pregnancy.



This image is of a 12-week pregnancy.

The purpose of the scan is to accurately 'date' the baby if there is any doubt about the gestation.

It will also be necessary to undergo a vaginal examination.

Once everything has been explained, anxieties answered, concerns discussed and arrangements agreed, a consent form will be required to be signed.

Risks of Abortion
The principal risks associated with the procedure at any stage are:

- Bleeding
- Damage to the cervix (uterine neck)
- Damage to the uterus (perforation of the uterus with an instrument occurs in

about one in every 200 surgical procedures)

Following the procedure there are a number of possible complications:

- Bleeding
- Pain
- Infection. This is usually indicated by bleeding, pain and often an offensive discharge. Treatment is with antibiotic.
- Retained products of conception. Sometimes debris from the procedure remains in the uterus. The products prevent the uterus from shrinking back to its normal size and bleeding persists. In such circumstances it may be necessary for the patient to undergo a further dilatation and evacuation (D&E) procedure (formerly called a Dilatation and Curettage (D&C) to remove the remnants.

Late complications could include:

- Rarely a more persistent infection of the reproductive organs (pelvic inflammatory disease)
- As a result of infection
    - Increased risk of infertility
    - Increased risk of ectopic pregnancy
- Very occasionally damage to the cervix during the procedure may result in a increased risk of recurrent miscarriage

The actual technique for abortion will depend on the number of weeks pregnant that the woman is.

1. **<u>Early Pregnancy</u> (up to nine weeks)**
   The procedure with so-called medical abortions is to take two medications 48 hours apart. The first, *mifepristone*, is a drug which makes the uterine lining hostile to an implanted egg. The second drug, taken 48 hours later, is called *prostaglandin* and it results in a shedding of the uterine lining together with the developing foetus. The first stage is normally without symptoms but the second stage is accompanied by nausea and sometimes severe cramp-like pain, together with bleeding. The uterine shedding usually occurs within 5-7 hours.

2. **<u>Vacuum aspiration (7-15 weeks)</u>**
   This procedure, used for many years, consists of dilating the cervix (neck of the womb) to allow the entry of instruments and the contents of the uterus are then sucked out. A curette may be used to loosen and separate conception products from the uterine wall and the aspirator then removes them. The process is preceded by the insertion into the uterus of a drug to soften the cervix. The procedure is carried out in a clinic or hospital and the woman is normally allowed home the same day. The post-operative bleeding may persist for up to ten days.

3. **<u>Later abortion (16-24 weeks)</u>**
   In the later stages of the pregnancy, a procedure may be undertaken by:
   - surgical two-stage abortion
   - medically induced abortion.

   Using the surgical technique, the stages are carried out under general anaesthetic; thye first stage is to 'prepare' the conceptus for removal and the second stage is an extended dilatation and evacuation.
   The medical technique involves the injection of prostaglandin to simulate an early labour with, often powerful, uterine contractions lasting up to twelve hours. Once the products have been expelled a dilation and evacuation is necessary to ensure that the uterus is empty.

For the vast majority of women, abortion is a traumatic event, associated with a range of emotions. The care surrounding abortion has improved considerably over recent years with greater support associated with making the decision and following the procedure. There are now sources of advice including the GP and the following supportive and skilled organisations:

Marie Stopes UK **0345 300 8090**

British Pregnancy Advisory Service
0345 730 4030

Family Planning Association
0845 122 8687

Brook Advisory Service Text & webchat
(aimed at women under 25)

paullambden@compuserve.com