Anesthesia or Analgesia Related Deaths of Women from Legal Abortion: The Need for Increased Regulation

According to the Centers for Disease Control, since 1983 anesthesia-related complications have become the most frequent cause of death of U.S. women from legal abortion. The vast majority of these anesthesia-related deaths appear to occur during first trimester abortion under general anesthesia. (Lawson, 1994) Despite the known dangers from the use of general anesthesia compared to local anesthesia, it remains in widespread use. A 1993 survey by the Alan Guttmacher Institute found that 33% of free-standing abortion facilities and 17% of hospitals which perform abortions offer general anesthesia. (Henshaw, 1995) A 1981 survey of National Abortion Federation members found that only 58% exclusively used local anesthesia. (Landy and Lewit, 1982) Another survey by the Alan Guttmacher Institute found that 21.8% of the induced abortions in the U.S. during 1982 were under general anesthesia (Joseph, 1987)

This article reviews some of the various methods and kinds of anesthesia and/or analgesia used in connection with induced abortion and the risk factors with respect to the various methods. In addition, some of the accumulated evidence of compliance or non-compliance of abortion facilities with general standards developed for the administration of anesthesia will be reviewed.

Types of Anesthesia or Analgesia

The various types of anesthesia procedures are: general anesthesia, conscious sedation, monitored anesthesia, and local or regional block. General anesthesia includes the loss of consciousness as well as the loss of feeling or sensation. It thus results in the loss of the patient's protective reflexes. Regional block administers anesthesia, frequently by injection, with a syringe, to a limited region. In the abortion context, this is usually called a paracervical block. Conscious sedation reduces or eliminates feeling or sensation. Analgesia relieves pain without loss of consciousness. The lowest effective concentration of analgesic agents should be used. (ACOG Technical Bulletin No. 112)

In the abortion context, analgesics or sedatives are used frequently in combination with paracervical block. If heavy sedation is used it may closely approximate general anesthesia. The analgesics or sedatives may be given orally, by injection or intravenously. Since the protocol for use of anesthesia or analgesics in the context of induced abortion is controversial, a wide range of various drugs and techniques have been employed.

Fast-acting barbiturates are frequently employed for induced abortion under general anesthesia. Once administered, the drugs rapidly enter the bloodstream. However, although efficient, they tend to compromise safety because of the risk of respiratory depression. The various types include: methohexital (Brevital), thiopental (Pentothal), and thiamylal (Surital). Other drugs known to have been used to induce general anesthesia prior to induced abortion include droperidol (Inapsine), halothane, nitrous oxide and ether. All of these drugs have been implicated in the deaths of women from legal abortion.

The anesthetic which appears to be most likely to be used for local or
A wide range of analgesics or sedatives have been employed in connection with induced abortion. These may be administered prior to, during or after the abortion. These include: Librium, diazepam (Valium), perperidine (Demerol), Sublimaze, ibuprofen, lorazepam, Althesin, alfathesin, alfentanil, Nubain, morphine-scopolamine, pethidine, midazolam, flumazenil, fentanyl, droperidol (Inapsine), ketamine, enfurane, thiamal (Surital), halothane (Fluothane), Synalogos DC, and nitrous oxide/oxygen. Some of these drugs have also been experimentally used for paracervical block, and apparently, depending on the dosage, may be used for general anesthesia as well.

**Anesthesia Standards**

Somewhat different standards apply depending upon whether local, regional block, conscious sedation or general anesthesia is administered. The American College of Obstetricians and Gynecologists (ACOG) and the Joint Commission for Accreditation of Health Care Organizations have established standards for the use of anesthesia in doctor’s offices, outpatient clinics, ambulatory surgical centers, and hospitals. All require record-keeping, patient screening and testing, qualified personnel, patient monitoring, and provision for emergency care. ACOG standards state that "abortion may be performed in a physician’s office, an outpatient clinic, a freestanding ambulatory surgical center or a hospital." For second-trimester abortions, instillation abortions or for patients with other risk factors, an ambulatory surgical facility is preferred and in some states required.” ACOG standards only describe local anesthesia or conscious intravenous sedation for physicians offices or outpatient facilities. Ambulatory surgical centers are specifically authorized to use local, general or regional block anesthesia. They further state that ambulatory surgical facilities, whether free-standing or hospital based, should apply the same standards as hospitals for anesthesia. (ACOG Guidelines, 1996)

According to the Joint Commission for Accreditation of Health Care Organizations, the same standards for general anesthesia also apply to sedation, with or without analgesia, which in the manner used, may be reasonably expected to result in the loss of protective reflexes. Loss of protective reflexes is defined as an inability to handle secretions without aspiration or to maintain a patent (open) airway independently. (JCAHCO, 1996)

Also, some local governments and/or states have statutes or regulations for anesthesia which would need to be taken into account. Manufacturers’ recommendations regarding the use of specific drugs also represent potentially important standards or guidelines.

**Local vs. General Anesthesia**

According to the Centers for Disease Control (CDC), deaths of women undergoing legal abortion attributable to general anesthesia complications represented 29.4% of

The results of another investigation were published in a recent book entitled *Victims of Choice* (1996) written by Kevin Sherlock. This investigation used newspaper reports, coroner reports, malpractice suits and other investigative information to identify 135 clearly established or suspected deaths of U.S. women from legal abortion during 1973-1994. Of these, at least 36 (26.6%) were anesthesia or analgesia-related of which at least twenty-two (22) involved reports of coroners or medical examiners. Of the 36 anesthesia-related deaths, at least twenty-three (23) resulted in malpractice claims against the abortion facility by the next of kin of the deceased woman. Some of the deaths resulted in investigations by state health departments, district attorney's offices or medical...
licensing boards. The use of general anesthesia also appears to be a contributing cause of abortion related deaths of women from other causes. A CDC study of women during 1971-1975 who were undergoing first trimester abortion, found that the incidence of uterine hemorrhage, uterine perforation, intra-abdominal hemorrhage, and cervical injury were all significantly higher for general anesthesia compared to local anesthesia. (Grimes, 1978)

According to the CDC, 20% of the abortion-related deaths of women in the U.S. during 1972-1987 resulted from severe hemorrhaging. (Lawson, 1994) And it has been reported by the CDC that uterine trauma (perforation or rupture) increases by 1000 fold the risk of death of women from legal abortion. (Grimes, 1983)

Loss of Protective Reflex

In addition to the loss of protective reflexes preventing independent breathing or aspiration, a woman undergoing abortion under general anesthesia may lose the ability to feel pain or other sensations. There is an increased likelihood of general anesthesia increasing the risk of cervical laceration, perforation and hemorrhage. This is thought to be due to the protective effects of a conscious patient who reacts when the person performing the abortion pushes too hard with an instrument, thereby causing injury. (Stubblefield, 1986)

Local or Paracervical Blocks

The use of local anesthesia, although considered safer than general anesthesia, also carries a risk of death. In one death, a toxic level of lidocaine was found when 25 ml. of 2 percent lidocaine without epinephrine (500 mg.) was administered to produce both a paracervical and pudendal block. In another case, a woman died after receiving 20 ml. of 1 percent mepivacaine (200 mg.). (Grimes and Cates, 1976) In two other cases, it
4 RESEARCH BULLETIN

appeared that the women died from an overdose of epinephrine free lidocaine which exceeded the manufacturer's recommendations for their body weight. (Berger, 1974) After these deaths, a study was undertaken to determine the minimum dosage of lidocaine to eliminate toxicity in the blood. It concluded that 90-100 mg. of lidocaine was associated with safe blood levels. (Blanco, 1982)

There has been very limited study of the overall risk of life-threatening convulsions in connection with induced abortion under local anesthesia. In the Joint Program for the Study of Abortion (JPSA), which took place in the early 1970's, an incidence of 7 convulsions was reported among 19,792 suction curettage abortions performed under local anesthesia for a rate of 3.5 per 10,000 abortions. (Berger, 1974) Another later study reported three significant lidocaine reactions in 11,747 second trimester dilatation and evacuation abortions. (Peterson, 1983)

Because of the risk of toxicity from paracervical anesthesia, the CDC stated in 1976 that, "... physicians should administer paracervical anesthesia only in settings in which resuscitative drugs and equipment, as well as personnel skilled in their use, are immediately available. If toxicity is suspected, the injection should be stopped immediately. The patient should be given high concentrations of oxygen by mask to raise her oxygen reserve in case convulsions ensue. If tremor, twitching or convulsions occur, the patient should be treated with intravenous diazepam or a rapid-acting barbiturate... If cardiovascular arrest occurs, the patient should be treated in the usual manner with oxygen ventilation, cardiac massage, bicarbonate and inotropic agents." (Grimes and Cates, 1976)

A later study at Planned Parenthood abortion facilities reported 5 convulsive seizures among 22,000 women obtaining first trimester abortions under paracervical block. This represents a rate of 2.3 per 10,000 abortions. After the occurrence of these seizures, a protocol was introduced which limited the injection of 1% lidocaine to no more than 16 ml. and usually only 12 ml. This was done because it was concluded that the early anesthetic complications occurred because an excessive amount of anesthesia was given in fewer sites, without withdrawal of the syringe plunger to assure that the anesthetic had not entered a blood vessel. Because it was clearly shown that seizures can occur during abortion under local anesthesia, it was concluded that it is necessary to have resuscitative drugs, an airway, oxygen, and trained personnel immediately available to the procedure room. It was also concluded that personnel should include those who are certified in cardiopulmonary resuscitation (CPR). Also, if patients had a suspicious history of idiosyncratic reaction to local anesthetic agents, they were not given local anesthetic agents. After the introduction of these changes, no further convulsive seizures were reported. (Hakim-Elahi, 1990)

Pre-Existing Risk Factors in Women

Some women are allergic to or have a sensitivity to drugs used as anesthetics for induced abortion. This may occur with both local and general anesthesia. Allergic reactions to lidocaine as well as general anesthetics which resulted in the death of women have been reported. However, despite this fact a medical history form used by an abortion facility may only ask a single general question as to whether or not the woman has any allergies. Another abortion facility in a form entitled Facts about Early Abortion merely stated: "Some women may be allergic to novocaine derivatives. If this is known, it is important to tell the doctor." Nothing was stated about the potential risk factors of allergic reactions.

A CDC study of women who had died during 1972-1985 from general anesthesia complications of induced abortion identified nine (9) out of twenty-seven (27) women to have preexisting medical conditions. These were asthma (1), hypertension and obesity (1), multiple sclerosis (1), fever and diarrhea (1), cervical cone biopsy (1), and obesity (4). The book, Victims of Choice, identified: bronchial asthma (1), bronchial asthma and contact sensitivity (1) chronic...
General

Challenging the Language of the Culture of Death, Vol 8, No 2, May/June, 1995


Comments on the U.S. Supreme Court Decision in Planned Parenthood v. Casey, Vol 4, No 4, Summer, 1992

Policy Considerations in the Public Funding of Abortion, Vol 4, No 2, Summer, 1991

Induced Abortion as Birth Control, Vol 8, No 1, Mar/April, 1995

African-Americans and Induced Abortion, Vol 6, No 1, Nov/Dec, 1993

Personality Characteristics of Women Who Had Induced Abortions, Vol 4, No 3, Spring, 1992

Report on Health Effects of Abortion on Women: Conflicts and Needed Research, Vol 2, No 2, Spring, 1989

The Abortion Experience for Victims of Rape and Incest, Vol 2, No 1, Fall, 1988

Adverse Physical and Psychological Effects on Women (see also Maternal Mortality/Premature Death)


Sexual Dysfunction Related to Induced Abortion, Vol 11, No 4, Sept/Oct, 1997

Induced Abortion as a Violation of Conscience of the Woman, Vol 8, No 4, Sept/Oct 1995

Recent Research on the Adverse Psychological and Social Effects of Abortion, Vol 11, No 2, May/June, 1997

Post-Abortion Syndrome as a Variant of Post Traumatic Stress Syndrome, Vol 3, No 4, Winter, 1991

Fragmentation of the Personality Associated with Post-Abortion Trauma, Vol 8, No 3, July/Aug, 1995
Post Trauma Sequelae Following Abortion and Other Traumatic Events, Vol 7, No 1, July/Aug, 1994

Grief Responses Following Induced Abortion, Vol 6, No 3, Mar/April, 1994

Induced Abortion as an Independent Risk Factor for Breast Cancer, Vol 5, No 3, Summer, 1993

The Relationship of Induced Abortion to Child Abuse and Neglect Vol 4, No 1, Spring, 1991

Delayed Negative Emotional Reactions in Post-Abortion Women Compared to Post-Miscarriage Women, Vol 2, No 1, Fall, 1988


Women's Health and Abortion I. Deterioration of Health Among Women Repeating Induced Abortion, Vol 5, No 1, Winter, 1993

Special Issue on Repeat Abortion, Vol 2, No 3, Summer, 1989
  Repeat Abortion Statistics
  Psycho-Social Aspects of Repeat Abortion
  Reflections on Repeat Abortion

The Incidence and Effects of Alcohol and Drug Abuse in Women Following Induced Abortion, Vol 3, No 2, Summer, 1990

Increased Smoking Rates in Women Following Induced Abortion, Vol 2, No 2, Spring, 1989

**Fetal Development / Fetal Tissue**

Medical Techniques in Connection with Induced Abortion to Assess Fetal Development and Remove Tissue and Organs, Vol 11, No 3, July/Aug, 1997

Misrepresentation or Ignorance of Fetal Development as a Factor in Psychological Injury Following Induced Abortion, Vol 9, No 4, May/June, 1996

**Informed Consent Issues**

Abortion Decision Making, Vol 3, No 1, Spring, 1990
  Fetal Development Information
  Women Report Lack of Informed Consent
  Male Attitudes in Abortion Decision-Making


Misrepresentation or Ignorance of Fetal Development as a Factor in Psychological Injury Following Induced Abortion, Vol 9, No. 4, May/June, 1996

**Teenage Pregnancy and Abortion**

Factors in Pregnancy Decision Making by Teenagers, Vol 7, No 4, Jan/Feb, 1995

Detrimental Effects of Adolescent Abortion, Vol 3, No 3, Fall, 1990

Psycho-Social Aspects of Adolescent Abortion, Vol 3, No 3, Fall, 1990

Claims of Injury Involving Induced Abortions by Teenagers without Parental Notice or Consent, Vol 10, No 4, Jan/Feb, 1997

**Legal Issues** (see also Informed Consent Issues)


Legal Liability for Physical Injury or Infection Following Induced Abortion, Vol 9, No 3, Mar/April, 1996

Legal Liability for Emotional Injury Following Induced Abortion, Vol 9, No 2, Jan/Feb, 1996

Legal Protection of the Unborn Child Outside the Context of Induced Abortion, Vol 11, No 1, March/April, 1997

**Effects on Men** (see also Effects on Marriage/Family)

Portraits of Post-Abortive Fathers Devastated by the Abortion Experience, Vol 7, No3, Nov/Dec, 1994

Abortion Attitudes and Experiences in a Group of Male Prisoners, Vol 6, No 2, Jan/Feb, 1994

Sexual Dysfunction Following Induced Abortion, Vol 11, No 4, Sept/Oct , 1997
**Effects on Marriage/Family** (see also Effects on Men)

The Effects of Abortion on Marriage and Other Committed Relationships, Vol 6, No 4, May/June, 1994

Sexual Dysfunction Following Induced Abortion, Vol 11, No 4, Sept/Oct, 1997

Induced Abortion and its Relationship to Child Abuse and Neglect, Vol 4, No 1, Spring, 1991
  - Wantedness Not a Factor in Abuse or Neglect
  - Induced Abortion as Precipitating Child Abuse or Neglect

The Impact of Abortion on Surviving Siblings: Case Studies, Vol 2, No 1, Fall, 1988

Children Born Following Refused Abortion, Vol 2, No 4, Fall, 1989

**Pregnancy Care Center Studies**

Characteristics of Women Seeking Services at an Independent Crisis Pregnancy Center, Vol 2, No 2, Spring, 1989


**Maternal Mortality / Premature Death**

Induced Abortion as a Contributing Factor in Maternal Mortality or Pregnancy-Related Death in Women, Vol 10, No 3, Nov/Dec, 1996

Women's Health and Abortion II. Risk of Premature Death in Women from Induced Abortion: Preliminary Findings, Vol 5, No 2, Spring, 1993

**Refused Abortion**

Children Born Following Refused Abortion, Vol 2, No 4, Fall, 1989

**Long Term Effects**


Stress Reactions Following Induced Abortion, Vol 3, No 4, Winter, 1991

Grief Responses from Induced Abortion, Vol 6, No 3, Mar/April, 1994

*Order back issues at $1 each from: Marie Hagan - National Right to Life Committee 419 - 7th Street NW #500 - Washington, D.C. 20004 Checks payable to Storer Foundation*
5 RESEARCH BULLETIN

Failure to take an adequate medical history may result in women with asthma or other lung problems to be at risk, particularly for abortion under general anesthesia. In one instance a woman died following general anesthesia administered by a nurse anesthetist in preparation for an induced abortion. The decedent had a history of asthma. She was one of four women who died at the same facility from anesthesia-related causes during 1986-1988. Her death certificate listed bronchial asthma, and contact sensitivity as a contributing cause of her death from the sequelae of anoxia due to respiratory arrest. Bronchial asthma was the contributing factor in the death of another woman at the same facility from anesthesia-related complications in connection with induced abortion. Later the abortionist at the facility lost his license to practice medicine because of failure to take adequate medical histories of women, among other reasons. (Sherlock, 1996)

The preexisting use of drugs may also constitute a risk factor for death when interacting with analgesic or anesthetic drugs used in induced abortion procedures. In 1981 a Missouri woman died who was taking the anti-psychotic drug, Thorazine. She was given Valium and Sublimaze in the process of obtaining an induced abortion and subsequently died. The abortion facility was accused of not having heart monitoring equipment, general anesthetic equipment or adequate resuscitation equipment or procedures. In another instance, a Maryland woman died in 1989 after receiving a fast-acting barbiturate prior to the abortion. She went into cardiac arrest and was deprived of oxygen for 12 minutes before paramedics arrived on the scene. Medical examiners later found a trace of heroin in her blood. (Sherlock, 1996)

NOV/DEC 1997

This was confirmed in Victims of Choice. This investigation reported on 135 U.S. women who died from legal abortion from 1973-1994, and found that there were 36 anesthesia-related deaths related to legal abortion. In at least eleven (11) cases there was evidence of failure or incompetent intubation or attempt to resuscitate. In addition, there was evidence of lack of emergency equipment in eight (8) cases, negligent or unqualified personnel in twelve (12) cases, and failure to monitor women in eight (8) cases.

In at least six (6) of the cases the paramedics were called. However, in one instance there was a 40 minute delay before they arrived; in another case they arrived 20 minutes after the woman stopped breathing; in still another case they arrived after the woman had been without oxygen for at least 12 minutes, and another where the paramedics arrived 1 to 1 1/2 hours after the initial onset of difficulty. In another instance the woman was blue and in cardiac arrest when the paramedics arrived. They also reported that the abortion staffers had put an oxygen mask upside down on her face. Thus, it appears that a substantial number of the women would not have died if the abortion facility had competent personnel and adequate equipment along with a pre-established plan to put into operation to handle an emergency situation. (Sherlock, 1996)

Women may select general anesthesia without being made aware of the risks. For example, general anesthesia may be promoted by abortion facility "counselors" for economic reasons because there is frequently an additional charge by the abortion facility for general anesthesia. According to press reports, one
abortion clinic attempted to do so by offering "counselors" additional cash bonuses if general anesthesia was used. In this instance, the abortion facility paid "counselors" a $2 bonus for general anesthesia, while Demerol and Valium bonuses were 75 cents and local anesthesia was only a 25 cent bonus. (Crutcher,1996)

An examination of various forms of abortion facilities also indicates that a description of risks from anesthesia may be inaccurate or incomplete. For example, a form entitled Facts about Early Abortion which is provided to women seeking induced abortion, contains this statement: "A local anesthetic is usually injected into the cervix (lower part of the uterus). In some cases a tranquilizing medicine is administered. A general anesthetic may also be used." In a later section on the same page under Local Anesthetic Reaction it states: "Some women may be allergic to novicaine derivatives. If this is known, it is important to tell the doctor." Other than warning about possible narcotic allergic reactions, no information whatsoever was provided during the abortion procedure may influence the type or kind of anesthesia. One study of 101 women undergoing abortion under local anesthesia and various analgesia reported that 52 felt calm, 20 were tense, 19 were worried, and 9 felt horrified, and 22 had severe or very severe pain. (Jakobbson,1990) This pain and anxiety, or lack of patient cooperation (a phrase coined by an abortionist) can lead to a number of possible abuses with anesthesia. Some abortionists will resort to heavy sedation or general anesthesia to make certain the abortion occurs. One Wisconsin abortionist required women to sign a statement in advance authorizing him to administer Twilight Sleep, Valium and Demerol I.V., if necessary in his judgment, in order to complete the abortion procedure.

Movement of the woman during the abortion procedure may also increase the risk of an anesthesia overdose. In one study which used either alfentanil and nitrous oxide or pentanyl and nitrous oxide as an anesthetic during induced abortion, approximately two-thirds of the women were reported to have moved during the abortion procedure. In 23-30% of the cases the movement was vigorous. This necessitated repeated additional doses of narcotics and in about 20% of the cases required one or two incremental doses of thiopentone. (Enright and Parker,1988)

Use of Anesthesia for Distressed or Exploited Women

Fear, anxiety or discomfort prior to or during the abortion procedure may influence the type or kind of anesthesia. One study of 101 women undergoing abortion under local anesthesia and various analgesia reported that 52 felt calm, 20 were tense, 19 were worried, and 9 felt horrified, and 22 had severe or very severe pain. (Jakobbson,1990) This pain and anxiety, or lack of patient cooperation (a phrase coined by an abortionist) can lead to a number of possible abuses with anesthesia. Some abortionists will resort to heavy sedation or general anesthesia to make certain the abortion occurs. One Wisconsin abortionist required women to sign a statement in advance authorizing him to administer Twilight Sleep, Valium and Demerol I.V., if necessary in his judgment, in order to complete the abortion procedure.

Another article describing abortion procedures stated, "Unless lack of patient cooperation indicate otherwise, (abortion) is carried out under cervical block." (Castadot, 1986) One Swedish study of patient discomfort among 101 women using local anesthesia and premedication reported that six (6) women who were perceived by the doctors as not cooperating received additional anesthesia. (Jakobbson,1990)

General anesthesia may be used on special populations who undergo induced abortion. For example, an abortion facility may, as a matter of policy, administer general anesthesia to all teenagers undergoing abortion apparently because of their frequent fear and anxiety. (Donati,1996) General anesthesia also appears to be routinely used if fetal tissue or organs are to be obtained, apparently to protect against distress of the woman. (Lindvall,1989) (Gustavii,1989) (Peterson, CM et al,1988)

Vomiting during an abortion is a risk factor for death. If the woman is under local anesthesia her "gag reflex" would still be functioning. However, if she is under general anesthesia it would be impaired and increase the risk of death as a result. Vomiting may occur because the woman has recently had food prior to her undergoing abortion, despite a possible warning not to do so. Vomiting can also occur because of anesthetic or analgesic drug reactions. In one case death resulted when a woman went rigid from an apparent seizure and then started vomiting. She had been given an analgesic known to cause vomiting, and the abortionist had failed to determine whether or not she had recently eaten. He continued with the abortion and made no attempt to clear her airway. She later died in a hospital. (Sherlock,1996, p.30)

An examination of various forms of abortion facilities also indicates that a description of risks from anesthesia may be inaccurate or incomplete. For example, a form entitled Facts about Early Abortion which is provided to women seeking induced abortion, contains this statement: "A local anesthetic is usually injected into the cervix (lower part of the uterus). In some cases a tranquilizing medicine is administered. A general anesthetic may also be used." In a later section on the same page under Local Anesthetic Reaction it states: "Some women may be allergic to novicaine derivatives. If this is known, it is important to tell the doctor." Other than warning about possible narcotic allergic reactions, no information whatsoever was provided during the abortion procedure may influence the type or kind of anesthesia. One study of 101 women undergoing abortion under local anesthesia and various analgesia reported that 52 felt calm, 20 were tense, 19 were worried, and 9 felt horrified, and 22 had severe or very severe pain. (Jakobbson,1990) This pain and anxiety, or lack of patient cooperation (a phrase coined by an abortionist) can lead to a number of possible abuses with anesthesia. Some abortionists will resort to heavy sedation or general anesthesia to make certain the abortion occurs. One Wisconsin abortionist required women to sign a statement in advance authorizing him to administer Twilight Sleep, Valium and Demerol I.V., if necessary in his judgment, in order to complete the abortion procedure.

Analgesic or anesthetic drugs may be used as a form of manipulation to induce a woman to obtain an abortion. At a Missouri abortion facility women were administered the sedatives Anaprox DS and Hydroxyzine to reduce anxiety and which also cause drowsiness thus altering their state of consciousness before they completed the consent process. (Sloan v. Women's Community Health Center) In another instance, a woman who was fearful and ambivalent and still resisting undergoing an abortion was administered an anesthetic intravenously without her knowledge or consent which resulted in her having no recollection of the procedure. She subsequently suffered both
physical and emotional injury.

A woman may seek out general anesthesia in repeat abortions if she has had severe pain from an earlier abortion under local anesthesia. Women having first or repeat abortions may also select general anesthesia in an attempt to repress the abortion experience and attempt to alleviate psychological distress. (Polk-Walker, 1993) However, women who fail to take emotional considerations into account, engage in denial, or let others decide for her have not received proper counseling, (Landy,1986) and may end up regretting their decision later. (Reardon, 1987)

**Anesthesia Record-Keeping**

The medical history and operating report of a significant number of abortion facilities is frequently very sketchy, particularly with medical records reviewed in connection with possible malpractice litigation. For example, one operating report of a woman with post-abortion complications, did record vital signs and the analgesic used, but did not record at all the type or amount of anesthesia administered, nor was there any record of a consent of the woman undergoing the abortion. In addition, the medical history was reported to be "minimal " and the physical exam " cursory " as described by a medical expert.

In another instance, the operative report provided the name of the anestheologist, recorded that general anesthesia had been administered for a three minute period which coincided with the time of the abortion operation. But, there was no mention of the type or amount or method used. Although the woman aspirated gastric or mouth contents into her lungs while under general anesthesia, there was no mention of it on the operative report. Instead, it merely stated that the patient tolerated the procedure well and was taken to the recovery room in satisfactory condition. The aspiration resulted in a lung infection shortly after leaving the facility, with a high fever approaching 105 degrees C. Subsequently she died after negligent treatment for her bronchial infection at another hospital. ( Jeffies v. Memorial Hospital of Gardena)

In a third instance, a woman was admitted for a first trimester abortion under local anesthesia. The type and amount of local anesthesia was 40 cc of 1% carbocaine (400 mg.) It was not stated whether or not the carbocaine contained epinephrine or was epiephrine free. Nor was there any reference to the woman's body weight. In the expert medical review of the case no mention was made of the dosage of local anesthesia. This may be due to the fact that the minimum dosage of carbocaine for induced abortion under local anesthesia had not yet been determined. However, other references indicate that a much lower amount should be used. Thus, a potentially toxic dosage may have been administered.

**Conclusions**

It appears that a substantial number of anesthesia-related deaths from legal abortion are preventable. There is evidence of an overuse of general anesthesia by abortion facilities possibly because it permits greater efficiency of operation, and possible increased revenues for those who use it. General anesthesia or heavy sedation also is a potentially effective tool of control over women to assure that abortion occurs even among those who are anxious, nervous or fearful of obtaining an abortion. General anesthesia appears to be particularly attractive to women who are attempting to repress the abortion experience or who are suffering psychological distress. Thus, it appears that there is a particular moral aspect to abortion that is a factor in the use of general anesthesia for induced abortion.

The evidence is clear and convincing that general anesthesia has a greater risk of death or serious injury than local anesthesia. Part of the greater risk occurs because of inadequate screening, testing and evaluation of women seeking abortion. Another important reason for increased risk appears to be due to inadequately trained or negligent personnel involved in the administration of anesthesia. When anesthesia-related deaths have occurred, there is frequently poor or non-existent monitoring of patients, and an appalling lack of adequate provision for emergency care and treatment. However, there appear to be adequate standards or guidelines in place which could be applied in a more systematic manner with respect to abortion facilities to prevent deaths from occurring. In some situations, additional legislation may be necessary. But it appears that all that is necessary is to require abortion facilities to only meet the same anesthesia standards required of other medical facilities.
References


Enright, AB and Parker, JBR, Double Blind Comparison of Alfentanil Nitrous Oxide and Fentanyl Nitrous Oxide for Outpatient Surgical Services, Can J Anaesh 35 (5): 462, 1988


Hanson, Mildred, Second Trimester D&E Abortion, Rev. 2/12/85


Jeffries v. Memorial Hospital of Gardena, Los Angeles Co. Superior Court Case No. SWC 73020

Joseph, Stephen, Commissioner of Health of the City of New York, Letter dated June 5,1987 to Gynecologists, Anesthesiologists, Administrators and Others Concerned with the Provision of Abortion Services, quoting Alan Guttmacher Institute


Landy, Uta, Abortion Counselling: A New Component of Medical Care, Clinics in Obstetrics and Gynecology, 13 (1): 33 March, 1986


Lindvall. O. et al, Human Fetal Dopamine Neurons Grafted into the Striatum in Two Patients with Severe Parkinson’s Disease, Arch Neurol, 46: 615 1999

Peterson, CM et al, Eds, Fetal Islet Transplantation (1988) p. 186

Peterson, HB et al, Comparative risk of death from induced abortion at 12 weeks or less gestation performed with local versus general anesthesia, Am J Obstet Gynecol 141:763, 1981

Polk-Walker, GC, Counselling Implications in a Client’s Choice of Anesthesia During a First or Repeat Abortion, Nursing Forum, 28 (1): 22, Jan/Mar, 1993

Reardon, David, Aborted Women: Silent No More (1987)


Sloan et al v. Women’s Community Health Center et al, Greene Co., MO. Case No. 196CC2100