Medical Techniques in Connection with Induced Abortion to Assess Fetal Development and Remove Tissue and Organs

This article describes some of the techniques, procedures, uses, or experiments on the bodies, tissue and/or organs of unborn children either at the time of the induced abortion or subsequent to the abortion. They represent only a very small sample of the many various research experiments and techniques involving removal of tissue or organs from unborn children. These tests and experiments, although performed on someone officially deemed to be a non-person, also frequently have the remarkable ability to demonstrate the humanity of the unborn child, and indeed, are referred to as human by many of the authors of the studies.

However, the scientists or doctors appear to be primarily interested in developing the most efficient medical techniques to attempt to advance medical knowledge and clinical applications. The French philosopher and theologian, Jacques Ellul, has identified modern technique as a form of idolatry. He notes that, "Technique worships nothing (and) respects nothing."

Many believe that technological solutions will be found to any conceivable technological problem. This creates the technological imperative: What can be done will be done! It is clear that modern science with its emphasis on the perfection of technique, does not respect the sanctity of human life in the womb. Instead the unborn child is used as a means to the desired ends of another, or merely as an object to be studied.

Fetal Reaction to Anesthesia

One example of an experiment demonstrating the humanity of the unborn child is a Scandinavian study, published in 1988, which attempted to determine fetal movement patterns and the development of the central nervous system in an unborn child. Fetal movements were recorded in 20 women prior to first trimester induced abortion. The median gestational age of the unborn children was 11.5 weeks as measured by ultrasonographic measurement of crown-rump lengths. Ten women were randomly chosen for administration of 10 mg of morphine and 0.4 mg of scopolamine 1 hour before the abortion. The other 10 women were not premedicated. Approximately 15 minutes prior to the abortion, 400-600 mg of thiopental was administered to all 20 women. A real-time ultrasound scanner and time-distance recorder measured fetal images and movements. Thiopental concentrations were measured in maternal plasma, placental tissue and in amniotic fluid.

In the 10 women premedicated with morphine-scopolamine, fetal motor activity was practically abolished after the thiopental injection. In the 10 other non-premedicated women, the abolishment of fetal movements was delayed by about 3 minutes. During the second minute after the thiopental injection, there was an increase both in the number and incidence of fetal movements, as compared to the control period. There was a positive correlation between the number of fetal movements and thiopental concentrations both in maternal plasma and placental tissue.

Technique worships nothing, respects nothing.

The authors noted that morphine acts in humans in specific sites and receptors in the brain and other tissues. In the brain these receptors are located in the frontal...
and temporal cortex, thalamus, striatum, hypothalamus and spinal cord. Scopolamine is known to induce a state of sedation in the central nervous system. Thiopental rapidly passes across the blood-brain barrier and within minutes it is distributed to the whole brain leading to complete motor arrest. At first, however, excitatory responses may be observed suggesting an initial depression of certain inhibitory systems or a transient increase of excitatory transmitters. The authors concluded that the results suggested the presence and function of drug receptors or synaptic (nerve cell contact) transmitter substances in the fetal central nervous system at this particular stage of pregnancy which regulate nerve impulses towards the periphery.

Comments: This experiment tends to support the claims made in "The Silent Scream", produced by Dr. Bernard Nathanson. The Silent Scream depicted an abortion at 12 weeks gestation. The film showed that the fetus is touched with a probing dilator and moves away in response to this as well as the suction curet. The film also showed an increase in the rate of heartbeat in response to a perceived threat. The results of this Scandinavian experiment also tend to support the claim that the unborn child, at least in the late first trimester, would feel pain at the time of an induced abortion.

Fetal Brain Stem Obtained for Grafting into Patients with Parkinson's Disease

In a technique described in an article published in 1989, doctors at the University of Lund, Sweden, removed the fetal brain stem tissue during an induced abortion at 9-11 gestational weeks (menstrual weeks) to graft into the brain of patients with severe Parkinson's Disease. The article was co-authored by some 20 doctors including those from Sweden, England, and the United States. The U.S. doctors were Barry J. Hoffer and Robert Freedman from the University of Colorado Health Sciences Center, and Ake Seiger of the University of Miami, Florida.

In order to obtain the tissue, women who had not previously carried children to term were pretreated for some hours with an osmotic cervical dilator (Lamicel) or by vaginal administration of a prostaglandin analogue. Women were given general anesthesia or alternatively were sedated along with a paracervical blockade. Then a speculum was inserted into the vagina, the cervix was grasped with a tenaculum, and the cervical canal was dilated to a No. 11 Hegar dilator. Two methods were used to collect the human fetus. In one method a plastic cannula (10 mm. outer diameter) connected to a syringe was inserted into the uterus. Under ultrasound guidance, the opening of the cannula was directed to the fetal head. Suction was applied and the fetus was slowly aspirated and fragmented into the cannula.

Alternatively, a similar low pressure vacuum aspirator technique was employed, regulated by a vacuum pump, but without ultrasound guidance, and a metal cannula. The cannula was removed from the uterus and disconnected from the syringe or the vacuum pump. To avoid bacterial contamination, the fetal tissues were transferred into a sterile Petri dish. The part that contained the brain stem was identified with the aid of a dissecting microscope and rinsed in glucose and saline solution. This desired part was then prepared for grafting into a portion of the brain of patients with severe Parkinson's Disease. The article described in detail the procedure used to graft the fetal part into the patient's brain.

The authors concluded that a modest improvement in motor function was observed but that no major therapeutic effect from the operation was observed and that widespread clinical trials with the procedure were probably not warranted. They noted that early reports of fetal grafting reported a more pronounced improvement in Parkinson's Disease patients than observed in the present study.

Comments: The description of the abortion reflects a number of alterations in the abortion procedure which compromises the health and safety of the woman. First, general anesthesia or sedation of the woman is used. The use of general anesthesia for first trimester induced abortion has been criticized by Warren Hern, the author of Abortion Practice (1984, 1990), a leading text on the subject. In discussing whether general anesthesia or local anesthesia should be used, he states, "the degree of bleeding experienced under general anesthesia is greater, the risk of perforation is greater, and the risk of death due to aspiration of vomitus, among other things, appears to be greater... There are numerous advantages in local anesthesia over general anesthesia. First, the patient is alert, responsive, and communicative both during and immediately after the procedure. She is able to report important symptoms that may signal the occurrence or onset of serious complications in time to prevent them from becoming more serious or even fatal. Second, the patient has a clear head within minutes after the procedure. Third, the gag reflex is not diminished under local anesthesia. Abortion patients have occasional difficulty in not eating or drinking anything for a fixed number of hours before the abortion pro-
 procedures. Fourth, patients who have had general anesthesia with previous abortions almost invariably have severe emotional problems dealing with the current abortion, in both the preoperative and postoperative phases. Fifth, the use of general anesthesia eliminates physician-patient interaction during the abortion.*

Procedures for obtaining human fetal tissue appear to significantly increase the health risk to women.

Many of these criticisms of general anesthesia would apply to sedation as well. Use of general anesthesia is one of the leading causes of abortion-related death of women. Also, uterine perforation increases the risk of abortion-related death more than 100 fold, and that due to hemorrhage more than 1000 fold.* U.S. federal regulations impose a restriction on the acquisition of fetal tissue from living fetuses, i.e. no changes may be introduced into the procedure to terminate the pregnancy that may cause greater than minimal risk to the fetus or the pregnant woman.7 The use of general anesthesia or sedation appears to introduce more than a minimal risk to the woman.

Hern also stresses careful control of the cannula to prevent uterine trauma.8 When the operator is seeking to obtain a specific type of tissue by the use of a cannula, it would seem likely that the important element of control would be lost. This is an important point because the suction cannula causes a major percentage of uterine perforations during first trimester abortions.9

The plastic cannula was most likely used in order to visualize the tissue and organs. Little research has been done comparing the efficiency of plastic and metal cannulas. One early study on Iranian women concluded that there were no significant differences in amounts of retained tissue, frequencies of cannula obstructions, and procedure times. However, it was recommended that the plastic cannula be used only once because of difficulties of resterilization.9

Use of human fetal tissue to treat Parkinson's disease has resulted in only limited improvement.

A few other reports have also been published in the literature which describe abortion procedures to obtain fetal brain tissue for patients with Parkinson’s Disease. One was published as a letter to the editor in The Lancet in 1989.10 It describes the abortion of unborn children at 8-10 gestational weeks by the use of a plastic cannula connected to a 60 ml syringe with suction applied to aspirate so that only the fetus and amniotic fluid enter the cannula. It is reported that it is essential that suction cease as soon as the fetal fragments appear in the transparent cannula. Otherwise the tissues will be macerated on impact with the syringe piston. In order to do so, it is reported that careful coordination between the ultrasound operator and the suction operator is required. Again, this was done with the woman under general anesthesia.

Another 1994 report11 published by a doctor with the Tampa Women’s Health Center and co-authored by a doctor at the University of South Florida, describes a similar process. In the Florida study low pressure suction was used with only local anesthetics and no ultrasound guidance. It was reported that neural tissue was structurally intact enough to be used in 50% of the 300 cases without significant alteration of risks to the woman. However, the study had only very sketchy data on complications. Techniques of the type just described are also used in selective abortion where there is a multiple pregnancy.12

Grafting Fetal Brain Tissue into Immuno-suppressed Rodents

A Swedish study13 which was co-authored by Barry Hoffer at the University of Colorado Medical Center in Denver, Colorado, attempted to ascertain whether or not fetal human tissue could be grafted into the anterior chamber of the eye of rats and mice. The recipients were either immuno-suppressed rats or immunodeficient mice. The fetal tissue to be grafted was obtained from healthy women following first trimester induced abortion during the 8th to 12th week of gestation. The abortions were performed using paracervical blockade following premedication. After dilation of the cervical canal, fetal fragments were removed by forceps after which the abortion was completed by vacuum aspiration. The fetal tissue was collected and kept in isotonic saline until further processed. The tissue obtained were examined using a stereomicroscope and very small pieces were prepared from the fetal brain.

Human fetal tissue may be grafted into mice or rats for research purposes.

Other grafted areas included the parietal cerebral cortex, cerebellar anlage, spinal cord, ganglia, as well as tissue pieces from the adrenal gland and heart muscles.
Some of the tissue survived the grafts and continued to develop. The authors concluded that the data suggested that the transplantation of human fetal nervous tissues to the interior chamber of immuno-suppressed or immunodeficient rodent hosts yields a unique model system for studies of human brain development, developmental disturbances, connectivity, and the action of drugs.

Comments: There are apparently other potential uses for transplantation of fetal tissue into rodents. A Newsweek article published on February 22, 1993 reported that the research director of Systomix (Systemix) of Palo Alto, California claimed that they have transplanted tiny pieces of thymus, liver and lymph from human fetuses into mice born with no immune system. Within two months the transplants had grown to the size of a peanut and were producing human immune cells. This type of mouse appears to be a unique animal model for AIDS research. It has been reported that these mice sell commercially for $2000 each.

Obtaining the Fetal Pancreas for Transplantation into Diabetic Patients

Researchers from the Sansum Medical Research Foundation in Santa Barbara, California, describe the use of organs from second trimester abortions. In a book entitled “Fetal Islet Transplantation” (1988) the process of obtaining the fetal pancreas for transplantation was briefly explained. It states: “Fetal human pancreases were obtained from 49 aborted fetuses ranging in gestational age from 14-24 weeks. Each abortion was induced by laminaria dilation of the cervical canal 12-16 hours before mechanical expulsion of the fetus. The women underwent the abortion under general anesthesia.

The consent form allowing researchers to use the tissue in experiments that may lead to better treatments for persons with chronic diseases was presented to the women by the floor nurse at the abortion facility (apparently prior to the abortion). It was reported that out of the first 100 women, 92% approved the request, and that these women, in general, expressed comfort from feeling that ‘some good would come of the decision to have an abortion.’ The researchers did not enter the operating area, but stayed in a sterile receiving alcove next to the operating room and never met the woman. Within 10 minutes the pancreas was removed aseptically and immediately processed for tissue culture.”

The authors stressed that when saline or prostaglandins are used to induce abortion, there may be a 24-48 hour period of decay before the uterus is emptied. In contrast, the procedure of dilation and extraction does not affect the viability of the aborted pancreatic tissue because no installation procedure is used.

Human fetal tissue or organs from second trimester abortions ideally require an intact fetus.

A later edition of the same book published in 1995 described a somewhat different procedure. It stated, “The human pancreatic tissue is obtained at one of several procurement centers after termination of pregnancy by dilation and extraction between 12 and 24 weeks gestation. The tissue arrives at our laboratory after periods of 5 min. and 24 hours of warm and cold ischemia, respectively. For the past 3 years, viability of tissues under these conditions has exceeded 98%, a fact that facilitates the transport of tissues across the country without the worry of tissue necrosis.”

Comments: A Finnish study published jointly by Finnish and Canadian authors in 1988, has reported that the islet-like cell clusters had a better yield and viability if hysterectomy of mechanical dilation and extraction procedures were used compared with prostaglandin.

It is possible that a type of partial birth abortion was utilized in order to obtain the fetal pancreas. The 1988 text on Fetal Islet Transplantation describes the abortion in terms of a mechanical expulsion of the fetus. The 1995 version uses the phrase “dilation and extraction” which could also include an intact body. It has been reported that in the case of the islets of Langerhans, the preferred method is one that produces an intact fetus, as the islets are hard to identify using other methods, or where the abortion was performed too early. James Bardsley, president of the Institute for the Advancement of Medicine, a non-profit agency involved in fetal tissue procurement, has been quoted in press reports as saying, in order to obtain tissue or organs from second trimester abortions, the abortion must be done by dilation and evacuation, in which the doctor essentially pulls the fetus out of the anesthetized woman.

It was also reported that the fetal pancreas was removed with 5-10 minutes following the abortion. In removing organs or tissue for transplantation, it is desired that the warm ischemia time, i.e. the period during which the tissue remains warm but is deprived of oxygen, be minimized to minimize deterioration of the donor cells.
However, by doing so, it is possible that the fetus is not actually or legally dead at the time of removal, and a live birth becomes a distinct possibility. There are special problems in defining fetal death. Knowledgeable observers have concluded that guidelines or legislation establishing the appropriate criteria are lacking and urgently needed. Federal regulations define a dead fetus as “a fetus ex utero which exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cord (if still attached).” According to this definition, it could be possible that the child would still be alive at the time of removal of tissue or organs.

Removal of Fetal Eyes following Elective Abortion

Researchers at the Department of Neurobiology and Anatomy at the Rochester School of Medicine obtained 21 human eyes from elective abortions. The aborted unborn children ranged in age from 8-20 gestational weeks. The eyes were collected and stored in Optisol solution. Under a dissecting microscope, an incision was made and the neural retina of the eye was detached from the retinal pigment epithelium.

According to the article, interest in human retinal pigment epithelium (RPE) has been increasing as its role in health and degenerative disease becomes better known, particularly as it relates to retinal degenerative diseases such as age-related macular degeneration. It was stated that for transplantation the goal is to obtain RPE of the utmost purity. It was found that optimum results occur when the isolation of the RPE is quick (within 1 hour after availability) to avoid tears when grasped with forceps which is likely to occur if the RPE has been stored for 24 hours.

Use of Fetal Liver to Measure Hepatitis C Infection

In this Italian study, primary human fetal hepatocytes were isolated from the livers of 9 week gestation fetuses obtained from therapeutic abortions. These were then grown in a serum-free medium. These were then inoculated with serum samples from two hepatitis C virus (HVC) infected patients. There was evidence that HVC replication took place in primary human fetal hepatocytes by detection of certain intermediate replication substances and the presence of viral antigens in the infected cells. It was concluded that primary human fetal hepatocyte cultures might prove useful for the study of HVC replication as well as for the production and assay of infectious viruses, with important implications for diagnosis and prevention of HVC infection.

Comments: Hepatitis C has been recently identified as an important and serious health issue. This could very well increase the pressure to use fetal livers or other fetal tissue or organs to attempt to alleviate the problem, even if the research results were modest at best. With a continuing potential supply of tissue or organs available due to legal abortion, it thus theoretically becomes merely a matter of finding the best technique to accomplish the goal. If the other laudable goals of eliminating Parkinson’s Disease, diabetes, or other diseases are added to the equation, it tends to tip the balance of the scales in favor of legal abortion based on the hope, however remote, that use of fetal tissue or organs will bring about a cure.

Use of Fetal Ovary Cells for Attempted Treatment of Infertility

Ovaries from 27 human fetuses of 12 gestational weeks obtained after abortion by suction extraction were examined with electron microscopy and squash preparation studies. The research was supported by a National Institutes of Health Grant. It was determined that meiosis (cell division) begins in the fetal ovary between 11-12 weeks of age.

It has been since proposed by Roger Gosden, a Scottish writer, in a 1992 article that sterility among women arising from follicular ovaries be clinically assisted by transferring the spare oocytes from human fetuses which have been aborted. He stated that there are enormous germ cell reserves in the ovaries of these aborted fetuses as well as the capacity to transfer them to sterile patients. However, the use of fetal eggs for infertility treatment was subsequently banned in England by the Human Fertilization and Embryology Authority (HFEA) which stated that only ovarian tissue from live, consenting donors would be acceptable for infertility treatment. A survey by the HFEA had found that of nearly 10,000 responses, 83% were against using fetal eggs for infertility treatment. However, more than half of the respondents were in favor of using fetal eggs for research.

Roger Gosden’s idea of implanting a fetal ovary to help infertile couples received considerable criticism in the U.S. “The idea is so grotesque as to be unbelievable,” according to ethicist and lawyer George Annas. He said that an ovary was different from other tissue because its eggs contain genetic material that will affect the next generation. “Should we be creating children whose mother is a
dead fetus? What do you tell a child? "Your mother had to die so you could exist." Using fetal ovaries also creates grandmothers who were never mothers, and further upsets what society views as the natural order of generations. Ethicist Dr. Arthur Caplan said, "We don't have any scale yet for someone to find out they exist but their mother did not come into personhood.

Dr. Robert Devine, an ethicist at the Yale University School of Medicine, said that there is a longstanding principle in ethics that forbade the use of a vulnerable population merely for convenience. Thus, he said it was no longer considered ethical to do research on prisoners or retarded children if the same studies could be done with people who were free to volunteer. In this case, human eggs could be obtained from adult women to donate. So that raises the question: Are fetuses a vulnerable population? And that question is at the very heart of the proposal.

Others, such as John Fletcher, did not think the government should ban such research and believed a morally diverse approach was needed. And the director of an egg donor program at UCLA School of Medicine said, "When you are talking about limits, you are really talking about excluding someone from health care."34

**Use of Induced Abortion to Study Anatomical Characteristics of Unborn Children**

Several studies were located which measured certain physical characteristics of unborn children either prior to the abortion, as part of the abortion, or following the abortion. For example, doctors at the UCLA Medical Center in cooperation with Eve Surgical Center in Los Angeles, inserted a catheter-based ultrasound miniature to visualize the unborn child at 5-8 gestational weeks immediately prior to abortion. The purpose was to improve the imaging process to learn more about fetal development.35

Another article by doctors at the University of Washington and Tacoma General Hospital, reported on a study of the characteristics of the ear and upper face of unborn children aborted in the second trimester. The stated purpose was to ascertain normal and abnormal development in response to various genetic and environmental factors.36

A Dutch study included aborted children in its study of the developmental and distribution of adipose tissue in their pelvic area among unborn children ranging from 9-37 gestational weeks.37 A Scottish study found evidence of immunoreactive arginine vasoressin in fetal skeletal muscle. Arginine is the major antidiuretic in human beings.38 Doctors at the University of Michigan Medical Center measured Rh blood types of unborn children who were aborted in the second trimester by dilation and evacuation.39 A French study, which included unborn children who had been aborted, measured the growth in fetal brain weight. A fixed brain weight was measured as early as 8-9 gestational weeks.40 A Dutch study which determined the essential fatty acid status of early fetal human development, used healthy caucasian women who decided to have abortions.41

Comments: These studies on fetal development at the time of induced abortion clearly indicate that the unborn child is merely an object to be studied. Some studies such as distortions of the face, could readily be used for purposes of eugenic abortion. Identifying the blood type of an unborn child is useful for organ transplantation.

**Use of Ultrasonography in Second Trimester Abortion**

Because the unborn child is not considered a legal person, the use of ultrasonography to detect fetal anomalies may be used to destroy their life as well as provide a potential benefit. This is illustrated by an Israeli study which examined 536 pregnant women at 13-16 weeks gestation in a Jerusalem hospital during 1989-1991. According to the study, transvaginal ultrasonography identified 42 structured anomalies. Of the 42 identified unborn children, 24 were aborted and one died without abortion. The remaining 17 unborn children and the rest of the pregnant population underwent a second transabdominal ultrasound at 18-20 weeks gestation. This identified 8 additional structural anomalies that were not previously identified. In 5 cases where there had been a structural anomaly identified at 13-16 weeks, the anomaly had disappeared at 18-20 weeks. The authors concluded that the ultrasound method detected 41 out of 46 abnormal fetuses (89% efficiency).42

Comments: The clear purpose of the study was to identify as many as possible unborn children with deformities and then destroy them. No effort was made to make any therapeutic intervention to correct any abnormalities, nor was there any mention of the moral problem of aborting unborn children who did not have any abnormality but were aborted anyway.

Eugenic abortion fits the technological mold. According to this view, if a fetus is "defective," it can be replaced by another later on. After all, it is argued, one fetus is pretty much the same as another... If society is viewed in mechanical...
The Psychological Effect of Handling Human Fetal Tissue

A questionnaire was designed by Australian researchers to measure the attitude of researchers handling human fetal tissue. The questionnaire was sent to 36 researchers who had handled human fetal tissue as well as two other groups of university researchers— one that dealt only with animal tissue and one that did not handle tissue at all. The questionnaire was also sent to a group of hospital nurses who dealt exclusively with patients and conducted no laboratory research. The questionnaire consisted of demographic background information, attitudes toward a variety of sensitive moral and political issues, general feelings about handling human fetal tissue, and an assessment of whether or not researchers were knowledgeable about the mechanics of retrieval and its use. A higher percentage of those handling human fetal tissue (41%) or who handled animal tissue (44%) professed no religious affiliation compared to nurses (22%). Nurses were also rated as being more “conservative” compared to researchers, which was partly, but not fully explained by the fact that more nurses were female.

Almost all (87%) of the people who had handled fetal tissue reported that they had experienced some reaction ranging from curiosity to tears and nightmares. It was further reported that these effects abated with time, and after a median of 12 months (range 1-84 months), 62% said they had no reaction. Among those with continuing reactions included an inability to forget the experience, sadness, and unpleasantness.

It was found that researchers who handled human fetal tissue were significantly more likely to not object to having, or their partner having an abortion. No association between attitude toward abortion and working with fetal tissue was found in other groups. Researchers in general were also more likely to believe that it is quite acceptable for fetal tissue to be used experimentally in medical research, even if there is no benefit to patients compared to nurses. Researchers who handled human fetal tissue and who believed their work would have no effect on them were also significantly less likely to frequent a place of worship than other groups. A substantial number of respondents (50%) were not aware of the maximum gestational age of the fetuses examined and whether the mother gave consent for the use of the tissue (57%). The authors concluded that there was no justification for saying that people who work with human fetal tissue are rendered inhuman or brutalized.

Comments: There is, in fact, evidence in this study that those who handle human fetal tissue may become hardened or desensitized with the passage of time and therefore may reasonably be considered to be more inhuman or brutalized. The data also suggests that the secularization of society and the loss of religious influence may also be a factor in the acceptance of fetal tissue for research.

A professor of medicine, psychiatry and biomedical ethics at Case Western in Cleveland, Ohio, was critical of the study. He recognized that organ and tissue transplantation is both life-saving and death-ridden and that the use of fetal tissue aggravates the life-death paradox. He stated that fetuses represent, for many persons, the most helpless and innocent stage of human development, and that the fetus who is a source of tissue is used twice for the benefit of others. This is the mother who presumably benefits by the abortion and for the interests of others who may benefit from the use of fetal tissue. He believed that the conclusions of the study were unjustified and demonstrated a bias that permeated the entire article.

What is useful may not be what is morally right.

Conclusions: Medical techniques related to induced abortion to procure fetal tissue and organs are international in scope. The countries involved include Australia, Sweden, England, Italy, Holland, Israel and the United States.

The importance of acquiring “useful” information and the idea that fetal tissue or organs may be “useful” is a strong theme in the studies.

This is consistent with other analyses. For example, James Bopp, Jr. and James T. Burtchaell criticized the endorsement of the use of aborted fetal remains for transplantation based on an utilitarian calculus of the “significant medical goals” which the research seeks to achieve. As early as 1949, American medicine was warned by Dr. Leo Alexander in his famous article on Medical Science under Dictatorship not to adopt the Hegelian premise of “what is useful is right” but that society, including the medical portion, had been infected by it.
Similarly, the influence of eugenics is apparent, particularly in the case of medical techniques to destroy the human fetus perceived to be abnormal or defective. However, there is also a certain ethical reluctance and reservation about using fetal tissue and organs obtained from induced abortions. This is apparent in the discussion on transplantation of fetal eggs into infertile women. It also arises in the article on the handling of human fetal tissue. There is yet remaining the idea among some that there may be limits and that the human fetus is a class of human beings that is particularly vulnerable to exploitation and therefore should be protected.

However, the ultimate question is perhaps not only the loss of protection of the unborn child, but the loss of humanity itself. C.S. Lewis calls the technicians of the new age “men without chests,” and states in his book, The Abolition of Man (1947), that “the man-moulders of the new age will be armed with the powers of an omnipotent state and an irresistible child, but the loss of humanity is perhaps not only the exploitation and therefore is particularly vulnerable to the techniques used to induce the abortion.

1. Footnotes

1. The Technological Society, Jacques Ellul (1964) p. 142. Ellul defines technique as the translation into action of the concern to master things by means of reason, to account for what is sub-conscious, make quantitative what is qualitative, make clear and precise the outlines of nature, take hold of chaos and put order into it. Id. at p. 45
4. Human Fetal Dopamine Neurons Grafted Into the Striatum in Two Patients With Severe Parkinson's Disease, O Lindvall et al. Arch Neurol 46:616, June, 1989
7. 45 Code of Federal Regulations 46.200(e)(4); see also AMA Policy on legal, ethical implications of fetal tissue use, Medical Ethics Adviser, Sept. 1989, p. 123 (fetal tissue donated for transplantation should not affect the techniques used to induce the abortion.
15. Fetal Inlet Transplantation, C.M. Peterson, L. Jovanovic-Peterson, B. Formby eds. (1988)
16. Fetal Inlet Transplantation, C.M. Peterson, L. Jovanovic-Peterson, B. Formby eds. (1990)
17. Morphology, Yield and Functional Integrity Of Inlet-Type Cell Clusters in Tissue Culture of Human Fetal Pancreatic Obtained After Different Means of Abortion, Tsubokoski et al., Acta Endocrinolologica (Copenhagen) 118:65, 1989
20. Legal and Ethical Aspects of Fetal Tissue Transplantation, p.30
22. 45 Code of Federal Regulations 46.203(f)
27. Use of Fetal Eggs for Infertility Treatment is Banned, Luisa Dilner, British Medical Journal 308:289, July 30, 1994
42. The Abolition of Man, C.S. Lewis (1947) p. 73, 77