Appendixes

DHHS Moratorium on Human Fetal Tissue Transplantation Research

While human fetal tissue transplantation research is a promising and exciting area of scientific study at this time, it has also created considerable controversy. The public debate is in one sense a straightforward, although complicated, discussion about the ethics of public funding of research that uses electively aborted human fetal tissue. for transplantation; however, the Federal Government's response to the controversy has itself raised questions.

In March 1988, a moratorium was imposed on the use of human fetal tissue from induced abortions for transplantation until the ethical issues surrounding this use could be adequately studied. Nineteen months after it was initiated, the moratorium was extended indefinitely by the new Secretary of Health and Human Services. Added to the ethical issues initially presented for discussion, the Federal Government's actions in this matter have been questioned on legal and ethical bases (3). It may be instructive to trace the events leading up to the moratorium, the activities of the National Institutes of Health (NIH) Human Fetal Tissue Transplantation Research Panel, and the events following the panel's report(11) and its acceptance by the NIH Director's Advisory Committee.

Events Preceding the Moratorium

Fetal tissue has long been used in research (2,4)including research involving the transplantation of fetal thymus tissue into humans—and the ethical questions it raises have been addressed by an executive branch commission and in Federal regulations [45 CFR 46]. When fetal tissue began to be used for neural grafting in the mid-1980s, however, some questioned whether these regulations adequately address all the issues raised by this research. In fiscal year 1987, NIH funded about \$11.2 million of nontherapeutic human fetal-tissue research (10). In 1987, a research protocol for implantation of fetal neural tissue from induced abortions into persons suffering from Parkinson's disease was proposed by a researcher at the National Institute of Neurological Disorders and Stroke (NINDS). The Institutional Review Board at the NIH clinical center reviewed the scientific, legal, and ethical issues raised by the protocol and accepted it for funding, yet the nature of the research was considered sufficiently controversial by the director of NINDS to be submitted for the approval of the Director of NIH. The Director voluntarily sought approval from the Department of Health and Human Services (DHHS) to review and approve the protocol. In response, the Assistant Secretary for Health issued a temporary moratorium on all fetal tissue transplantation research using tissue from

induced abortions until NIH could convene an advisory committee to examine the use of human fetal tissue from induced abortions for transplantation and make recommendations for its use. The advisory committee was asked to address 10 questions (see box A-l).

Although the intramural NIH proposal stimulated significant ethical debate, NIH funds had already been granted that year for an extramural protocol to study the effects of fetal pancreatic islet cells on juvenile diabetes. It is unclear why the intramural proposal received closer scrutiny than the extramural protocol.

One factor that may have impeded the decisionmaking processes within NIH is the lack of an authoritative body within the Federal Government to address ethical issues raised by biomedical research and treatment and to make policy decisions regarding them. The Ethics Advisory Board (EAB) that had existed within DHHS to address questions of this sort was disbanded in 1980. While the scientific, ethical, and legal features of the Parkinson's disease protocol were approved by the NIH Institutional Review Board, the protocol was regarded as problematic first by the director of the Institute performing the research and then by the Director of NIH. The Director of NIH was forced to turn to the Assistant Secretary for Health for advice on appropriate action.

Although the conditions of the moratorium were not retroactive, the investigators who had received NIH funds for fetal pancreatic islet cell transplantation voluntarily suspended their research because of the controversy. Since that time, only research funded by private institutions has continued. Although most privately funded fetal tissue transplantation has been stopped voluntarily, some initiatives in this area have continued. In late 1988, at the University of Colorado Health Sciences Center, physicians implanted fetal cells obtained from an induced abortion into the brain of a 52-year-old Denver man who had been suffering from Parkinson's disease for 20 years (1). Also in late 1988, physicians at Yale Medical School implanted human fetal cells into the brain of a woman suffering from Parkinson's disease, after first freezing the cells and testing their viability (6). The fetal cells used in this surgery were donated by a woman who had had an induced abortion in her first trimester (6).

The Report of the NIH Human Fetal Tissue Transplantation Research Panel

In response to the questions presented by the Assistant Secretary for Health, the Human Fetal Tissue Transplan-

Box A-l--Questions Addressed to the NIH Human Fetal Tissue Transplantation Research Panel

- Is an induced abortion of moral relevance to the decision to use human fetal tissue for research? Would the answer to this question provide any insight on whether and how this research should proceed?
- * Does the use of the fetal tissue in research encourage women to have an abortion that they might otherwise not undertake? If so, are there ways to minimize such encouragement?
- . As a legal matter, does the very process of obtaining informed consent from the pregnant woman constitute a prohibited "inducement' to terminate the pregnancy for the purposes of the research-thus precluding research of this sort under HHS regulations?
- Is maternal consent a sufficient condition for the use of the tissue, or should additional consent be obtained? If so, what should be the substance and who should be the source(s) of the consent, and what procedures should be implemented to obtain it?
- Should there be and could there be a prohibition on the donation of fetal tissue between family members, or friends and acquaintances? Would a prohibition on donation between family members jeopardize the likelihood of clinical success?
- If transplantation using fetal tissue *=== induced abortions becomes more common, what impact is likely to occur on activities and procedures employed by abortion clinics? In particular, is the optimal or safest way to perform an abortion likely to be in conflict with preservation of the fetal tissue? Is there any way to ensure that induced abortions are not intentionally delayed in order to have a second trimester fetus for research and transplantation?
- What actual steps are involved in procuring the tissue from the source to the researcher? Are there any payments involved? What types of payments in this situation, if any, would fall inside or outside the scope of the Hyde Amendment?
- According to HHS regulations, research on dead fetuses must be conducted in compliance with State and local laws. A few States' enacted version [sic] of the Uniform Anatomical Gift Act contains restrictions on the research application of dead fetal tissue after an induced abortion. In those States, do these restrictions apply to therapeutic transplantation of dead fetal tissue after an induced abortion? If so, what are the consequences for NIH-funded researchers in those States?
- For those diseases for which transplantation using fetal tissue has been proposed, have enough animal studies been performed to justify proceeding to human transplants? Because induced abortions during the first trimester are less risky to the woman, have there been enough animal studies for each of those diseases to justify the reliance on the equivalent of the second trimester human fetus?
- What is the likelihood that transplantation using fetal cell cultures will be successful? Will this obviate the need for fresh fetal tissue? In what time frame might this occur?

SOURCE: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Report of the Human Fetal Tissue Transplantation Research Panel (Bethesda, MD: 1988).

tation Research Panel convened, heard testimony from a variety of experts and interest groups, and submitted a report to the NIH Director late in 1988. A unanimous agreement was not reached among the 21 panel members, but the panel's report concluded (17 to 4) that the funding of research involving the transplantation of human fetal tissue obtained from induced abortions is acceptable public policy as long as carefully crafted safeguards are in place (see box A-2).

Although adamant dissent was voiced by four panel members, the report and its recommendations were accepted unanimously by the NIH Director's Advisory Committee. The advisory committee recommended that the moratorium on fetal tissue transplantation research be lifted. The Director of NIH concurred with this position in a memorandum to the Assistant Secretary for Health in January 1989 (12).

Events Following Acceptance of the Panel Report

The Assistant Secretary, upon the instruction of the DHHS Secretary, deferred action on the panel's recommendation that the Federal Government lift the moratorium (5). The new administration took no action until the new Assistant Secretary for Health recommended to the new DHHS Secretary in October 1989 that the ban be continued. The Secretary continued the moratorium indefinitely in November 1989 (9). No action was taken to implement any of the recommendations of the advisory panel's report.

The legal and ethical bases of the continuation of the moratorium have since been challenged. The moratorium was originally declared as a temporary measure until the ethical issues raised by fetal tissue transplantation could be addressed and recommendations could be made. The fact that it has been continued indefinitely without any

Box A-2—Recommendations of the NIH Human Fetal Tissue Transplantation Research Panel

- The decision to terminate a pregnancy and the procedures of abortion should be kept independent from the retrieval and use of fetal tissue.
- The timing and method of abortion should not be influenced by the potential uses of fetal tissue for transplantation *or* medical research.
- Fetal tissue from induced abortions should not be used in medical research without the prior consent of the pregnant woman.
- The decision and consent to abort must precede discussion of the possible use of the fetal tissue and any request for such consent as might be required for that use.
- The pregnant woman should be prohibited from designating the recipient of the fetal tissue transplant.
- Payments and other forms of remuneration and compensation associated with the procurement of fetal tissue should be prohibited, except payment for reasonable expenses occasioned by the actual retrieval, storage, preparation, and transportation of the tissues.
- Potential recipients of such tissues, as well as research and health care participants, should be properly informed as to the source of the tissues in question.
- Procedures must be adopted that accord human fetal tissue the same respect accorded other cadaver human tissues entitled to respect.

SOURCE: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Report of the Human Fetal Tissue Transplantation Research Panel (Bethesda, MD: 1988).

official announcement or opportunity for public debate has caused some to challenge its legal basis (7). The ethical basis of the continuation has also been challenged, since the reasons for its continuance had been rejected by the advisory panel upon whose recommendations the moratorium was supposed to be contingent (8).

On April 2, 1990, the U.S. House of Representatives Committee on Energy and Commerce's Subcommittee on Health and the Environment held hearings on human fetal tissue transplantation research. The subcommittee heard testimony from members of the NIH Human Fetal Tissue Transplantation Research Panel, representatives of organizations representing persons with various diseases that

fetal tissue grafting may treat, members of the scientific community, and the Assistant Secretary for Health. Strong views for and against the continued moratorium on fetal tissue transplantation research were expressed.

While on one level the ethical debate was clearly and publicly articulated, the events leading up to the moratorium and those that followed the NIH advisory committee's acceptance of the panel's recommendations raise questions of their own. These events add another layer of ethical considerations to the fetal tissue transplantation controversy: Is the procedure for ethical decisionmaking in government subject to the same scrutiny as the issues it is used to address? Again, the absence of a Federal agency for deliberation of bioethical issues maybe noted. These events may also be interpreted as a question about the relationship between personal moral or ethical convictions and the appropriate shape of public policy in a pluralistic society.

Appendix A References

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