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The Northwestern University Twin Study XV: Rationales for a Standard of Care in Compromised Twin Pregnancies

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Abstract. Current antenatal technologies have improved the obstetrician's ability to assess fetal well-being as well as to diagnose fetal compromise. These technologies have given rise to very difficult ethical issues in the management of compromised twin pregnancies: for example, a choice must be made between putting a healthy twin at risk due to preterm delivery for the sake of a compromised cotwin or of allowing the compromised twin to die in order to buy time for the healthy twin. Though each case is unique, good medical practice requires a standard of care by which consistent patient management can be proposed. In the pluralistic environment of Northwestern Memorial Hospital, our staff has favored a standard of care based on patient autonomy. This approach demands: 1) a practitioner who offers a thorough explanation of the diagnosis and possible treatment approaches; 2) time for the patient and her partner to assimilate this information and test treatment options against their personal value system; 3) a third, but disinterested, party to facilitate patient understanding and value clarification; 4) a practitioner either willing to support the patient's decisions or refer her to another practitioner who will.

Key words: Bioethics, Compromised fetuses, Twin pregnancy

Several diagnostic technologies developed in the past decade have improved obstetricians' abilities to assess fetal status in utero. These advances include ultrasonography, antepartum fetal heart rate testing, genetic studies, and measurement of ΔOD_{450} . The information obtained from these examinations often generates complex management issues. This is especially true in the case of twin pregnancies when it is determined that

one or other fetus is at risk for serious preterm compromise or has an overt anomaly. Although modern technology can provide sophisticated information regarding fetal status, the technology alone does not determine the right/best course of action. Rather, the ethical values of the parents and obstetrician must determine appropriate intervention strategies.

THE PROBLEM

In the early preterm period of 26-32 weeks, for example, discrepancies in fetal results for non-stress tests or Rh-sensitization make decisions concerning what is fair and equal treatment for both fetuses very difficult. Parents and physicians have a limited set of options: either putting a healthy twin at risk from prematurity for the sake of a compromised cotwin or allowing and/or causing a compromised fetus to die so as to provide some hope for a potentially healthy cotwin. One mother, after having had the risks of a 26-week delivery explained to her, exemplified this moral ambiguity with her reply, "It would not be fair to the healthy one to put it at risk for dangers of preterm delivery". In contrast, another mother faced with the possibility of one of her fetuses becoming more sensitized at 30 weeks, replied, "To be fair, I must treat both babies equally", and requested preterm delivery for the sake of the sicker twin.

A particularly difficult set of problems revolves around selective termination. Nature infrequently, and various reproductive technologies more frequently, create situations in which the presence of multiple fetuses in a single pregnancy put the mother as well as each individual fetus at extreme risk. To compound matters, this situation confronts couples who have gone to great lengths to achieve pregnancy. Now a choice must be made between selectively sacrificing one or more fetuses to save others, or of leaving all the fetuses in serious jeopardy from premature delivery.

Selective termination can become an issue for twin pregnancies if one fetus has an identified anomaly. In this situation, selective termination represents a much higher risk for the healthy twin since identification of the anomaly doesn't usually occur until the second trimester.

STANDARDS OF CARE

Even though each patient is unique, good medical practice requires developing a standard of care by which consistent patient management can be proposed. Three traditional sources of ethical wisdom provided a possible basis upon which a standard of care could be developed for such situations: outcome based criteria (Utilitarian) [5]; in-principled based criteria (Kantian, Aristotelian or the Principle of Beneficence) [1,3,4]; and criteria based on patient autonomy (Human Rights Stances) [2,7]. Each of these ethical traditions would argue not only to different conclusions, but from very different perspectives. Choosing any one of these criteria as a standard of care would provide consistency in management decisions, but each approach suffers from serious shortcomings.

In general, management decisions based on outcome (utility or risk/benefit) seem to correlate well with standards of medical judgment. Using statistical predictions of outcome, the risks and benefits of various management options can be calculated. These computations and a utilitarian philosophy would dictate that the best/right course of management would be that which offers the most benefit with least risk to all involved. The difficulty with this seemingly objective approach is that the various risks and benefits can be ranked quite differently by the diverse people involved in the decision making process. To the first mother quoted, it made perfect sense to gain additional time for the healthy twin, allowing nature to take its course for the second. Using her system of ranking outcome, the benefit of one healthy twin outweighed the risk of possible serious compromise to either one or both fetuses due to prematurity. For other mothers, the risk of losing either twin would be unacceptable. Despite its seeming objectivity, an outcome-based approach remains clouded in subjective priorities. It may also lack justice, since its logic would sacrifice a minority for the sake of a majority.

The use of an in-principled stance, similar to Kant's, avoids statistical guesswork and dependence on subjective priorities. It also provides the patient and practitioner with a stance that is "correct" regardless of outcome. Using such criteria achieves fairness in the sense that it requires the same treatment for all, independent of likely outcome. Whatever this stance gains in clarity, however, is lost in its ability to respond to the uniqueness of individual situations. An in-principled stance dictates treatment choices without regard to the families ability to live with those choices.

STANDARD OF CHOICE

In the pluralistic environment of Northwestern Memorial Hospital, our staff favors a standard of care based on patient autonomy. This approach requires: 1) a practitioner who offers a thorough explanation of the diagnosis and possible treatment approaches; 2) time for the patient and her partner to assimilate this information and to test the treatment options against their personal value system; 3) a third, but disinterested, party to facilitate patient understanding and value clarification; 4) a practitioner willing to support the patient's decisions or willing to refer her to another practitioner who will.

The strengths of this approach are: 1) it allows the patient and her partner the final say in the decision, as they are the persons who must live with its consequences; 2) it encourages the patient and her partner to "own" and take responsibility for the outcome, rather than "blaming" it on the physician; 3) it is a functional system that works in a pluralistic environment of patients and practitioners.

The major liability of this approach, however, is that it may leave the practitioner feeling similar to a "technician" executing the orders of a patient with skill and adroitness, but without regard for his/her own professional and personal ethical values. The practitioner's personal values and ethics remain the force behind the competence, compassion and care physicians offer their patients. However, there is no guarantee that the patient and practitioner will be motivated by the same ethical commitments and values.

One pilot study on the values motivating management choices of perinatal practitioners in cases involving potential fetal compromise has shown that: 1) 28% of respon-

dents were motivated by a “right to life” stance (an in-principled type stance), defined as an obligation to use all reasonable treatment to save a fetus, be that fetus healthy or handicapped; 2) 31% were motivated by a “quality of life” stance (a utilitarian type stance), defined as an obligation to treat or not treat based on likely outcome – treat if good, not treat if poor; 3) 26% felt it was “the patient’s choice” (a patient autonomy type stance), defined as an obligation to inform the family and adhere to the families’ requests for treatment options; 4) the remaining 15% were principally motivated by such concerns as legal liability, the dictates of “good” medicine or their understanding of legal requirements [6]. If this study is representative of American opinion, then the difficult ethical dilemmas that multiple pregnancy can raise, have a high potential for straining the relationships between patient and their practitioners, especially in cases where each party is operating from differing ethical and value frameworks.

CONCLUSION

Technology is not going to resolve the value issues raised by management options in compromised multiple pregnancies. In fact, as technology improves and provides more comprehensive prenatal information, the ethical dilemmas will multiply. For the practitioner, technical competence and skill, though fundamental, are not sufficient for good patient care. Compromised twin pregnancies push the practitioner, willing or unwilling, into the very human art and science of ethical decision making.

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