

S. Van McCrary, Shetal I. Shah, Adriann Combs, and J. Gerald Quirk, "Elective Delivery Before 39 Weeks' Gestation: Reconciling Maternal, Fetal, and Family Interests in Challenging Circumstances," *The Journal of Clinical Ethics* 23, no. 3 (Fall 2012): 241-51.

Exemplary Cases

Elective Delivery Before 39 Weeks' Gestation: Reconciling Maternal, Fetal, and Family Interests in Challenging Circumstances

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ABSTRACT

We present the case of a 36-year-old woman who has experienced three lost pregnancies; during the most recent loss, a full term pregnancy, she almost died from complications of placental abruption. She is now completing the 34th week of gestation and is experiencing symptoms similar to

those under which she lost the previous pregnancy. Despite a lack of specific medical indications, the patient and her husband firmly but politely request that the attending obstetrician/perinatologist perform an immediate cesarean section in order to alleviate the couple's anxiety about possibly never having a family. Discussing the case are an experienced perinatologist, a neonatologist, a regional perinatal center coordinator, and a clinical ethicist.

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INTRODUCTION

In almost every year between 1990 and 2005, the rate of preterm birth between 34 0/7 and 36 6/7 weeks' gestation increased.¹ These infants, termed "late-preterm" gestational age neonates, accounted for 12.7 percent of births in 2005, a 15 to 25 percent increase from 1990.² While this was originally attributed to an increased presence of maternal co-morbidities such as obesity and gestational diabetes in the general population, elective induction of labor and "by-request" cesarean section rates are also significant contributors. Late-preterm infants now consti-

tute 75 percent of all preterm births in the United States.³

Neonatal risks of late-preterm birth are substantial and represent an area of concern for neonatologists in the U.S. With each week of lower gestational age, risks for neonatal complications increase. Late-preterm infants are three times more likely than full term infants to require admission to a neonatal intensive care unit (NICU), mostly due to respiratory distress, hypoglycemia, poor feeding, and pathologic jaundice.⁴ In one large cohort, late-preterm infants were 8 percent of NICU admissions. More than 20 percent of 34-week infants develop respiratory distress syndrome, compared with 7 percent and 3 percent in 35- and 36-week infants, respectively.⁵ Mortality from late-preterm birth is significant. Of more than 420,000 births in the U.S. in 2000 and 2003, late-preterm infants exhibited a six-fold increase in mortality compared to full term infants in the early neonatal period.⁶

Amongst survivors of late-preterm birth, readmission and hospitalization after the initial NICU stay occur frequently. A retrospective study in Atlanta determined that 36.9 percent of late-preterm infants who presented to emergency care required hospitalization for an average of 5.7 days.⁷ The most common readmission diagnoses were: apnea/apparent life threatening event, hyperbilirubinemia, neonatal fever/suspected sepsis, respiratory problems, feeding problems, and hypothermia.

The long-term sequelae of late-preterm birth are now well described. These infants have a three-fold increased risk of cerebral palsy, with an overall incidence of mental retardation, seizure disorder, or cerebral palsy of up to 35 percent.⁸ Subtle neurocognitive defects are also increased in this population and have only recently become an area of study. Retrospective analysis of a late-preterm cohort found that 25 to 33 percent of these children required academic assistance at school age and/or required an individualized education plan.⁹ In later grades, these infants had a 24 percent increased risk for below-average reading scores in the first grade, and presented with poor reading competence up to the fifth grade.¹⁰

The costs of late-preterm birth are rising and present a significant public health concern. Neonatal care alone for these infants is estimated at \$841 million a year.¹¹ Factoring the sequelae of long-term morbidities, increased utilization of community and school resources, and hospital readmission places the costs at approximately \$19 billion.¹² Yet, despite increased awareness of the medical risks of late-preterm birth, data suggest that 23 percent of these deliveries lack an identifiable medical indication.¹³ Studies from the obstetric literature suggest that up to 90 percent of late-preterm deliveries may be avoidable.¹⁴

In an era of improved quality of healthcare delivery, programs aimed at reducing the burden of late-preterm birth have been widely implemented in the past five years. A commentary by a leader in the Center for Developmental Biology and Perinatal Medicine from the National Institute for Child Health and Human Development stated the risks and benefits of late-preterm delivery should be closely assessed.¹⁵ The Office of the U.S. Surgeon General and the Institute of Medicine called for increased research focus on this “public health problem.” These efforts renewed interest in a statement from the American College of Obstetricians and Gynecologists (ACOG), which as early as 1999 recommended that elective delivery take place after 39 weeks of gestation in pregnancies where the gestational age of the infant is well known, unless fetal maturity is documented by testing (although this testing can be inaccurate in late-preterm infants).¹⁶

However, these guidelines may promote conflicts between providers and individual patients who seek care and/or elective cesarean section. While routine cesarean sections that are not medically indicated are typically not performed, there can be distinctive circumstances in which obstetricians may consider the practice. These situations often result in ethical dilemmas and conflicts between providers of obstetric and neonatal care, raising issues of fairness, cost-effectiveness, and attendance to patients’ concerns.

Here we present a case of a mother who, based on past history, is significantly anxious

about continuing her pregnancy and requests from her long-term obstetrician an elective delivery. Following the presentation, we each offer an appraisal of the case from our respective professional positions.

THE CASE

Mrs. S is a 36-year-old, married woman who presents for neonatal consultation in the labor and delivery suite of a university hospital where she has been receiving care from the high-risk obstetrical service. She is currently 34 and 1/7 weeks gestation as determined by 12-week ultrasound. She has been pregnant four times, having experienced two spontaneous obstetric losses. Medical investigation for these losses resulted in a diagnosis of Factor V Leiden Mutation, a hypercoagulable state that increases the difficulty of conception.

Mrs. S underwent intra-uterine insemination via the reproductive endocrinology service last year, which resulted in a viable pregnancy. During that pregnancy, she presented with intermittent vaginal spotting and mild discomfort. She presented to the obstetric service and developed a complete placental abruption at 37 weeks, resulting in intra-uterine fetal demise and significant blood loss to the patient. As a result of the abruption, she was treated in a surgical intensive care unit (SICU) for two weeks. Now, Mrs. S's distress has increased because her best friend experienced a placental abruption two weeks ago at 34 weeks, resulting in the demise of twins at an affiliated hospital.

The current pregnancy was conceived via intra-uterine insemination. Mrs. S presents to the labor and delivery service with vaginal spotting and mild abdominal discomfort which resolves with intravenous hydration. Ultrasonographic assessment of the infant is normal, fetal heart rate and variability in heart rate are normal, and a biophysical profile upon admission reassures fetal well-being. Mrs. S's long-time maternal-fetal medicine specialist recommends discharge and reassessment in 24 hours. The parents of this infant request elective c-section. They state this abdominal pain is "exactly like last time" and without delivery now, they

will remain anxious about losing this infant until delivery. The parents both state they "cannot handle" this sense of anxiety given their previous experience, which they have tearfully recounted to the resident on call, the neonatal fellow, and the neonatologist who presents for consultation. Of note, the parents have exhausted their medical insurance for assisted reproductive technologies. Hence, there is a chance this could be their last opportunity to ever have a biologic child.

Given the absence of a medical indication for delivery at this late-preterm gestation, their obstetrician offers continuous in-hospital fetal monitoring on the labor and delivery service until full term gestation, offering to deliver the patient at 37 weeks if fetal lung maturity is reassuring. The parents refuse and again request a c-section at 34 1/7 weeks. The obstetrician provides thorough counseling to both parents on newborn outcomes. The neonatologist also provides detailed counseling to the parents based on the above information, noting that the infant has a significant risk of intraventricular hemorrhage prior to 34 weeks' complete gestation and emphasizes that the infant's brain is currently only 65 percent of full term size. The parents respectfully refuse to continue the pregnancy, with the father stating, "Doctor, we can live with a damaged baby, but cannot live with the uncertainty of not having a baby." Both medical teams offer the mother access to psychiatric liaison services for anxiety, as well as referral to in-hospital support groups for parents.

The parents refuse these services, stating they understand the risks to the infant but are willing to accept them. The neonatologist again offers to discuss the case with obstetrics and delay the pregnancy until 35 weeks, when the risk of intraventricular hemorrhage decreases, considering fetal lung maturity measurement at that time. The parents again tearfully and respectfully refuse.

QUERY

Should the providers accede to the parents' request for elective delivery in this case?

A Perinatologist's Perspective: Yes

Our patient is a 36-year-old woman with an abysmal obstetric history. She has had two consecutive miscarriages, possibly the result of a heritable thrombophilic disorder. She was treated appropriately for this disorder with low molecular weight heparin in her third pregnancy. Despite appropriate treatment, Mrs. S lost that pregnancy in the third trimester from placental abruption—itsself thought to be caused or associated with heritable and acquired thrombophilic disorders in some cases.

We do not know the cause of placental abruption in most cases. The true prevalence of placental abruption is not known, but is estimated to complicate about one in 200 deliveries.¹⁷ However, placental abruption in the third trimester that is serious enough to result in fetal death complicates about one in 400 pregnancies.¹⁸ The diagnosis of placental abruption is made clinically; there is no combination of laboratory tests, imaging studies, or *post-hoc* pathologic examinations that either make the diagnosis or exclude the diagnosis in all cases. For these reasons, it is believed that the true incidence of placental abruption is underestimated. We do know that women who deliver a stillborn baby as a result of placental abruption have a recurrence risk in a subsequent pregnancy of 12 to 20 percent.¹⁹ Importantly, and germane to our patient's care, the gestational age of a recurrent abruption is not related to the time of the abruption in the preceding pregnancy, but frequently occurs one to three weeks earlier.²⁰ Among women destined to experience a recurrent placental abruption, there are no prenatal diagnostic tests, no imaging studies, and no antecedent physical findings in the mother or the fetus that anticipate the time of abruption.

Mrs. S now finds herself in the early twilight of her reproductive lifetime—a twilight colored by the economics of medicine, the emotional burden of her recurrent reproductive failure, and the impending loss of fecundity that all women begin to experience after their mid-thirties. That twilight now becomes acutely darker with the news that a friend has delivered stillborn baby twins as a result of a placental abruption at 34 weeks of gestation. These

facts all represent significant elements in our patient's history and each must be weighed seriously when devising a clinical plan for the remainder of her pregnancy.

Mrs. S has progressed to 34 weeks of gestation. The fetus is clearly immature. Even if beta-methasone is administered to stimulate fetal maturation, the significant complications of preterm delivery are only decreased, not eliminated. The patient seems adamant about wanting to deliver at 34 weeks despite the risks.

The practice of medicine is not science; in the best of circumstances it is scientifically based. Clinicians do not practice in a laboratory and their patients are not mere "subjects." Medicine is both art and science. The art of medicine includes the application of science within a cultural and patient-centered context that results in the best outcome for the patient.²¹

Our patient clearly understands the risks associated with elective delivery of her fetus/baby at 34 weeks of gestation. On the one hand, she sees these risks as morbidities; on the other hand, she sees the 15 percent recurrence risk for placental abruption as a risk of mortality. She wishes for and seeks help in choosing life over the quality of the outcome for her child. Without being patronizing or paternalistic, I would review all of the clinical scientific evidence at hand; I would offer her in-patient expectant management until 37 weeks of gestation. If that option is rejected in favor of delivery at 34 weeks, I would provide my unwavering—if less than enthusiastic—support of her decision if I were convinced that her decision was based on a clear understanding of all of the issues. Finally, I am convinced that the team's willingness to include the family in the discussion regarding the options for the family's plan of care would contribute to the most beneficent outcome for them.

A Neonatologist's Perspective: Emphatically, No

Obstetric and neonatal ethical issues often result when the interests of a fetus and its mother conflict. Mrs. S's past experience with fetal loss, the recent experience of her friend, and her understanding that this infant may be

her last chance to deliver a baby, all inform her request to have an early delivery.

Parents are the customary decision makers on behalf of their children or fetuses; however, the risks posed to this fetus are too great, especially given the explicit recommendations of ACOG in this regard. The physicians' role is to be sensitive to the family's concerns, but provide the most current, evidenced-based medical practice available, dispassionate of the family's past experience. In my opinion, because the previous hypercoagulable state of this patient has been alleviated by medication, risk of placental abruption is not increased at this time. Further, the offer of continuous monitoring in the hospital provides for the earliest possible detection should an abruption occur, mitigating chances of an outcome similar to her past experience. Therefore, delivery should not be offered to the mother at this time.

Understanding Mrs. S's past experience, multiple attempts were made to assuage her anxiety and achieve a workable solution that is acceptable to the parents and afford the child the best medically possible outcome. Given the parents' refusal to entertain either of the negotiated options of in-house monitoring and fetal lung maturity testing, no "middle ground" was achievable. When parents make decisions that are not in their child's best interest, the role of the neonatologist, as a child advocate, is to act on behalf of the child. Although at times this is in direct opposition to the parents' wishes, the neonatologist's professional obligations require placing the child's interests foremost.

Unlike the obstetrician, who must balance maternal and fetal needs, the neonatologist advocates for the child, ensuring his or her voice is not lost amidst the medical team's sympathy for the parents' past history or drowned out by the high levels of anxiety experienced by the parents. To the neonatologist, there is sympathy for the parents, but no conflicting interests. It is clear that no child, given an option, would choose to be born with 35 percent less brain size and risk the long-term neurologic sequelae of this elective late-preterm birth. It is reasonable that no child, if given a voice, would even assume the short-term risks of mechanical ven-

tilation, which, in neonates, include pneumonia, pneumothorax, sepsis, and pulmonary hemorrhage, among others. In this case, even the traditional schematic of medical decision making, the risk/benefit ratio, fails to justify providing this delivery. Without any conceivable benefit, and significant short- and long-term risk, the risk/benefit ratio is, literally and mathematically, infinite.

The mother's anxiety over her past pregnancy loss is the obvious driver of this request and should be treated. Mrs. S, however, refuses referral to appropriate health professionals, and that is her right. Parents often make "bad" decisions on behalf of their children, and the decisions aren't inherently unethical. Although the parents maintain decision-making capacity, honoring their request without a true medical indication for delivery would violate the professional tenet of "do no harm" regarding the infant, and impose the potential for significant unwarranted and avoidable suffering.

Finally, the argument of over providing c-sections on request for "maternal anxiety" undermines the entire intent of the ACOG guidelines against avoiding elective late-preterm delivery. If "maternal anxiety," however warranted given past experience, is an indication, then "back pain," "fatigue," "need to return to work," and so on will soon follow.

Also of concern, particularly in obstetric cases, are the medico-legal issues. If the child, at school age, is not performing similar to peers, the parents can claim that, despite the documented efforts of the neonatal and obstetrical staff, they were not fully counseled on the risks of late-preterm birth. Peer review of experts would most likely err on the side of the ACOG guidelines, arguing against this elective c-section, possibly exposing the hospital, neonatologist, and obstetrician to litigation. However, seeking guidance from obstetric colleagues is warranted if the neonatologist believes this request is ethically wrong.

A Regional Perinatal Center Coordinator's Perspective: Yes

This family's medical and emotional situation present a conflicting set of circumstances

for the healthcare providers who have shared responsibility for their care. The majority of evidence related to the fetus supports continuing the pregnancy because of decreased risk of harm secondary to increased fetal maturity. Despite this, I believe the parents' desire for early delivery should be honored, because of their state of extreme emotional distress and the increased risk to the mother of another placental abruption. The manipulation of the date of delivery needs to be undertaken with the complete understanding by the entire healthcare team and the family of both the risks and benefits to the mother, fetus, and family.

Mrs. S has a complicated obstetrical history, including an abruption, fetal loss, and intensive care unit admission in the prior pregnancy. This serious medical crisis was preceded by two additional early pregnancy losses—not commonly recognized outside of the nuclear family as medical crises by the standard clinician, but, to the mother and father of a desired child, these are crises and need to be validated and considered when counseling families under difficult clinical circumstances.

In the mother's psyche, she has lost three children and almost lost her own life. From the father's perspective, he has lost three children and almost lost his wife. The family is seeking the assistance of the medical staff to support their decision and attempt to achieve an improved outcome for the mother: an intact placenta, no blood transfusions, and a normal post-delivery stay, and for the birth and discharge home of a live child.

There are known short- and long-term risks to an infant of this gestational age, including NICU admission and associated financial burden to the family and insurers; decreased body temperature and low blood sugar, which can precipitate a variety of problems including the need for intravenous glucose and inhibiting a mother's ability to exclusively breastfeed; respiratory distress, which may require breathing support, oxygen, and medications; apnea, which may necessitate the need to be discharged with cardiorespiratory monitoring; jaundice, which can prolong the length of stay and may require interventions such as phototherapy and, in ex-

aggerated situations, a blood exchange and extrauterine growth restriction.²² Long-term risks include a four-times greater risk of sudden infant death syndrome,²³ neonatal mortality (4.1/1,000 for late-preterm delivery versus 0.9/1,000 term delivery) and/or severe neurologic disability (1.7 percent of infants at 34 weeks versus less than 0.3 percent at >37 weeks).²⁴

If a family has been thoroughly counseled by both maternal fetal medicine and neonatology and understand that this decision may affect both the mother's and newborn's outcome, the efforts of the medical staff should be focused on anticipating and preventing short-term morbidity and educating the family regarding the potential long-term risk to their child.

Unfortunately, there is always a medical-legal risk to caring for high-risk pregnant women and their newborns. Although there is inherent risk in proceeding with the delivery and the care of this newborn at this gestation, the outcome of this baby may or may not be changed by increasing the length of gestation, especially in the context of an acute placental abruption, which would expose the fetus to a period of intrauterine hypoxia, hypercarbia, and acidosis, which can also lead to NICU admission, neonatal intensive care, and long-term poor neurodevelopmental outcome.

When conflicting sets of circumstances are faced by clinicians caring for pregnant women and their families, we need to remember that both groups are unified in the desire to improve the family's outcome. In this set of circumstances, we need to do our best to provide the family with evidence that they can interpret, and help to inform their decisions and to provide an environment where their decisions will be supported.

A Clinical Ethicist's Perspective: Yes, Under These Particular Circumstances

Like many couples, this husband and wife consider having at least one living child to be an essential component of their concept of "family." How then to characterize the interests of this fetus—as a potential member of a family-to-be that cannot exist if the fetus is not born alive, or a separate vulnerable patient whose

interests should take precedence over parental interests and anxiety? And to what extent are family members required to sacrifice their interests so that another family member can thrive? Finally, when, if ever, is it ethical for different physicians treating separate members of the same family to act in ways that may partially compromise the interests of their patient in order to achieve a good for the entire family?

For more than 20 years, a group of bioethicists and philosophers of medicine have argued for a more inclusive approach to complex medical cases that involve patients who are close to one another. Instead of a “rivalry of care,” in which autonomous individual patients and the physicians who champion their interests act separately, these scholars prefer a more integrated approach that considers the interests of all members of the family as a unit.²⁵ They argue that “medicine’s characteristic focus on the good of the individual patient has distorted the ways that families interact with their sick members,” and, conversely, that family values have “put pressure on medicine’s understanding of its own deepest values and sense of mission.”²⁶ In many ways this struggle mirrors the development of bioethics itself, as a movement away from a previously virtue-based practice of medicine, toward an individual autonomy-based model. As an alternative, adherents of this trend seek to reinvigorate a more nuanced ethical analysis that the purely principles-based bioethics may have forfeited—an analysis that takes families seriously while retaining the compassionate core of medicine’s basic values.

It is important to note that this trend is not limited to the ethics community. Many medical practitioners are also adopting novel ways of thinking about families. A leading concept in this field is that of the “family covenant,” which is now preferred by many practitioners of family medicine and medical genetics.²⁷ Such a covenant recognizes the intertwined nature of the interests of families and seeks to establish a framework for thinking about reconciling these complex, competing interests. In addition to its ready application to genetics and family medicine, some scholars have suggested that the family model is appropriate for analyzing end-

of-life cases.²⁸ A thorough discussion of the family covenant and its implications is beyond the scope of this case study, but its persistence suggests that physicians are taking the family unit more seriously as a framework for ethical analysis.

The work of John Hardwig provides one way to characterize this integrated approach to the ethics of families who are facing difficult medical dilemmas. As Hardwig notes, our typical conception of family maintains that to be a member of a family means to be morally required to make decisions based on consideration of what is best for the group, not one family member in particular. In some cases, specific family members may be entitled to special consideration, principally those who are vulnerable and lack capacity for participation in the decision; yet, this does not imply that such family members “deserve exclusive or even overriding consideration.”²⁹ As an alternative, he argues that “we must build our theory of medical ethics on the presumption of equality: the interests of patients and family members are morally to be weighed equally; medical and nonmedical interests of the same magnitude deserve equal consideration in making treatment decisions.”³⁰ Such an ethical presumption could be rebutted with sufficient justification, but the burden of proof will be on those who argue for special consideration for any particular family member.³¹ It is important to note that Hardwig does not appear to be claiming indiscriminate equality of *persons* regardless of their situation in the case (that is, as patients or nonpatients), but rather that all family members’ *interests* of comparable value should be considered equally. It is also not certain that he necessarily intended the concept of family covenant to accommodate the interests of neonates, but three of us (SVM, AC, and JGQ) find the family-based approach useful in this case.

Consider the respective psychological positions of mother and father in our case. To Mrs. S, losing three pregnancies (two spontaneous losses and one full term fetal death) was extremely painful, emotionally and physically, and she is now experiencing symptoms that suggest to her an impending repeat of those cir-

cumstances. In addition to the loss of previous fetuses, Mr. S experienced the critical illness and near-death of his wife as a result of a previous pregnancy. Extreme anxiety and a sense of foreboding on the part of each of these potential parents is completely understandable. In this sense, the nonmedical interests of the parents in having a child, and avoiding the emotional loss of failure to do so, present an existential threat to their concept of family that can be viewed as having sufficient magnitude to be equivalent to the medical interests of the fetus in isolation. At that point, the parents can embark on the herculean task of weighing their interests in achieving a family, as well as maternal medical risks, against the risks to the fetus of premature delivery—a decision substantially complicated by the fact that continuing the pregnancy might also result in death of the fetus, as has happened in the past. In this case, the parents appear to have carefully considered the best interest of the entire family under uncertain medical conditions. To override their decision would be ethically questionable under these circumstances without evidence of bad faith, especially since they are the ones who will have to live with the consequences of this most difficult decision.

Those who would argue for assessment of wholly independent moral interests of the future child (for example, avoiding unnecessary pain and suffering) in this particular case are left in no more certain a position than under a family-based analysis. This is because the specific preferences of neonates about such issues, and the precise medical outcomes, can only be ascertained long after the critical decisions have been made. Research suggests that many, but not all, disabled persons have substantial capacity for adaptation to their conditions, and that such capacity is often underestimated by others.³² At the time a decision is required, no one can know with certainty the extent of any future child's ability to adapt or what specific physical and mental challenges he or she will face. The family-based model is useful here because it avoids overreliance on the autonomy of a future, but currently unknowable, child. In our view, these parents are not arguing that they

would prefer diminished anxiety *at the cost of* risk of morbidity and long-term disability for their child (despite the fact that their unfortunate choice of language seems to imply this). Instead, we think the parents' argument is, in effect, "we would be extremely worried that *all* of the interests of our child would be lost if we do not act now to save the more fundamental ones."³³

Regarding the financial costs of this case, some might argue that refusing the parents' request for early delivery could save a large expenditure of funds on NICU care. I would prefer to avoid addressing, at a microlevel, issues that are better left to the macrolevel policy process because of the tendency of financial aspects to color the ethical analysis of particular cases. If pressed, however, I would suggest that such narrowly focused analysis overlooks possible unintended consequences and corresponding costs. In their proposed alternatives to early delivery, the obstetrician and neonatologist in this case were willing (arguably rightly) to admit the mother to hospital for an extended period of time in a labor and delivery suite with constant monitoring. The expense of an additional one to five weeks of high-level hospitalization should not be overlooked. Other factors in this analysis, the large costs of ongoing care for a potentially disabled child, as well as the possible emotional burdens, have reportedly been viewed as acceptable risks by both parents. It is to be hoped that the parents are accurately assessing their tolerance for these possible hardships. This is a key point, considering the degree to which our society continues to shift the burden of chronic care onto families and away from the healthcare system as a whole, in the interest of containing medical costs.³⁴ Further, if the exhaustion of insurance coverage does in fact mean this is the final chance for this couple to become parents, it adds additional justification for their decision to proceed (although admittedly, it simultaneously raises issues of their ability to support the special needs of a disabled child in the event of a bad medical outcome).

Although this is not a complete legal analysis, the general legal risks in this case, even in

the presence of an unusual parental request, do not appear to be appreciably elevated over the ordinary expected risks under these medical circumstances. Two types of legal risk are relevant here: first, the risk of fetal death or morbidity in utero, and second, the risk of late-developing disabilities that parents could attribute to birth injury. Regarding the first risk, some obstetricians (including our coauthor, JGQ), in cases of previous multiple preterm fetal demise, would actually prefer to deliver a fetus while alive and reasonably healthy in order to avoid legal risks of future death in utero.³⁵ Regarding the second risk, ACOG has not chosen to proscribe delivery at this gestation age in the absence of medical indications. Further, the physicians in this case have done everything reasonably possible to persuade the parents to wait—that is, three alternative offers of support for delayed delivery, plus repeated offers of mental health counseling and other related support services. If the offers of alternative plans and careful, repeated disclosure of potential risks and burdens of elective delivery at 34 weeks are meticulously documented in the medical record, legal risk does not appear unreasonably high. One variable on which this legal analysis does depend, at least in part, is the continued good faith of the parents who have promised that they are willing to accept a disabled child, with all the associated expenses and burdens. Of course, legal risk varies widely according to jurisdiction and other complicating factors, so actual risk is difficult to predict in the absence of context. In any event, the appropriate *ethical* outcome should be the primary determining factor.

In many similar cases a general rule would indicate that fetal interests, in isolation, could be optimized by the physicians' refusal to provide early delivery in the absence of new medical indications. Yet, the special concerns of this couple—their previous experiences of loss and suffering, hopes for creating a family, emotional stability, and uncertain risk to the fetus—suggest that this is a time when not following the general rule would be the more prudent course of action. As such, the well-being of the complete family would be served by agreeing to the

parents' request, providing appropriate medical support for the baby after birth, and continuing to offer emotional support for family members as needed. This is not to suggest that *any* request for elective early delivery should be granted. Nor does it suggest that this resolution is optimal or recommended for others who are differently situated, because the particular circumstances of each complex case must be analyzed individually. If the parents' reasons were trivial, such as convenience of scheduling or minimal maternal discomfort, it would not be ethical to compromise fetal interests on such grounds. Similarly, if the mother's medical history was less complex and severe, there would be less justification for early intervention. This case requires persons of good faith to make existential decisions under complex conditions of medical uncertainty. Hardwig's words appear to support a quasi-casuistic approach to challenging circumstances such as these: the best path "would be candidly to admit the moral relevance of the interests of other members of the family and then to support the family through the excruciating process of trying to reach a decision that is fair to all concerned."³⁶ If this can be accomplished, it can provide a humane resolution to a most tangled dilemma, albeit a resolution that is not without risks to all parties concerned.

EPILOGUE: INFANT AND MATERNAL COURSE

The infant was delivered by elective c-section, weighing 2,210 grams (4.87 pounds), with Apgar scores of 8 and 9 (a score of 7 to 10 is generally normal), suggesting a successful short-term transition to extrauterine life. The baby was subsequently transferred to the NICU for management of prematurity. Mrs. S's post-delivery course of hospitalization was uneventful. Upon arrival, the infant developed labored breathing and low oxygen saturations despite increasing amounts of oxygen delivered by nasal cannula. He was intubated for impending respiratory failure. His chest X-ray demonstrated moderate to severe respiratory distress syndrome, and he required two doses of intratracheally delivered

surfactant. He was electively extubated to continuous positive airway pressure on day three of life and required supplemental respiratory support until 35 4/7 weeks adjusted gestation age. The infant did not tolerate enteral feedings due to prematurity and intestinal dysmotility, requiring both an arterial catheter for the first five days of life and a central venous catheter for 11 days. Owing to the risk of infection, the infant was presumptively placed on intravenous antibiotics for 72 hours. Ultrasonography of the head demonstrated no intraventricular hemorrhage. He ultimately required speech therapy services to obtain nipple feeding and was discharged on day of life 13 on specialized preterm formula, multivitamins, and iron supplements. The infant's total medical charges, including hospital, physicians, and all supplemental services are estimated at \$64,325. High-risk pediatric follow-up care was not recommended, and the infant is currently being cared for by his regular pediatrician. Despite the positive outcome in this case, it is important to remember that the results could have been much less favorable.

MASKING OF THE CASE

The medical and social complexity of this illustration, including respect for the life narratives of mother, father, and fetus, *as family*, impelled us to mask the case rather than construct a fictional alternative. Numerous non-essential medical and personal details were altered. We did not obtain written informed consent. We believe masking enabled us to retain the complex nuances of the case without sacrificing the privacy of the family.

NOTES

1. T. Raju, "Late Preterm Birth: Challenges and Opportunities," *Pediatrics* 121 (2008): 402-3; T. Raju, "Epidemiology of Late Preterm (Near Term) Births," *Clinics in Perinatology* 33 (2006): 751-63; R. Loftin et al., "Late Preterm Birth," *Reviews in Obstetrics and Gynecology* 3, no. 1 (2010): 10-9.
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