# Elective cesarean: an option for primiparas?

Previously reserved for women with clear medical indications, cesarean is now requested by greater numbers of patients. But is it advisable for first-time mothers?

By W. BENSON HARER, JR, MD Should a primiparous patient be allowed to choose elective cesarean delivery? I believe the answer is yes.

It's a question of ethics rather than science. As long as the woman's decision reflects both

informed consent for cesarean section and informed refusal of attempted vaginal delivery, her autonomy should be respected—provided the physician's ethical obligation of beneficence would not be compromised.

Informed consent, in which the patient accepts the likely risks and benefits of a proposed therapy in relation to those of possible alternatives, is well ingrained in our practice. Informed refusal is a more recent concept in which the patient exercises the right not to follow a therapy that would be the physician's choice.<sup>1</sup> As for the obligation of beneficence, it requires that my participation does good—or at least minimizes harm.

In obstetrics, the historical paradigm is for all patients to attempt

vaginal delivery unless the physician identifies 1 or more indications for cesarean section. Such indications usually are based on short-term assessments. In recent decades, they primarily have focused on risks to the fetus. Yet, the pregnant woman and her baby

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face risks regardless of what is or isn't done. Those risks are variable, poorly quantifiable, incomparable, and highly subjective in relative valuations. Fortunately, with good prenatal care, they all are low.

> In the absence of a high probability of a clearly defined risk, do physicians and/or thirdparty payers-or even courts of law—have the right to impose their value judgments on the patient? Let's say the gravida decides that a 5% risk of incisional infection today is more acceptable than a 5% risk of surgery for urinary incontinence in 20 years. Who is to judge that her decision is wrong, especially if her risk of undergoing an emergency cesarean or traumatic operative delivery after a failed attempt at vaginal birth ranges from 15% to 20%? As the ethics committee of the International Federation of Gynecology and Obstetrics (FIGO) states: "Only the

woman can decide if the benefits to her of a procedure are worth the risks and discomfort she may undergo."<sup>2</sup>

Autonomy is the individual's right to selfdetermination. In democracies, it is particularly esteemed in regard to one's body. I treasure that right for myself and feel obligated to accord it to others. The FIGO ethics committee shares this sentiment, concluding that "no woman should be forced to undergo an unwished-for medical or surgi*continued on page 41*  cal procedure in order to preserve the life or health of her fetus, as this would be a violation of her autonomy and fundamental human rights."<sup>2</sup> An ACOG opinion echoes this statement.<sup>3</sup>

# The welfare of the fetus

The issue is complicated by the presence of a second patient—the fetus. After all, the physician's obligation of beneficence extends to the infant too. In discussing treatment options, the physician must educate the patient and her partner about the risks and benefits to the fetus as well as the mother. The obstetrician's advocacy for the baby may be minimal or extend to enlist the full weight of the law to supercede that of the mother.

Tradition suggests that mothers will unhesitatingly sacrifice their welfare in the interest of their babies. In other words, a woman accepts a duty of beneficence to her child that may supercede her own self-inter-

est. Thus, if a woman is advised to undergo cesarean because of the dangers of persisting in labor, she will agree to do so out of concern for her child. Unfortunately, this is not always the case. Some women will refuse cesarean delivery despite a clear threat to the fetus from continued labor. In such cases, physicians and hospitals have sometimes asked the courts to compel the mother to submit to surgery.

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The evidence suggests that a "normal"—i.e., easy, sponta-
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neous—delivery carries less risk than a cesarean section for both mother and child. Unfortunately, we cannot predict who will have such a delivery when 10% to 25% of attempted vaginal deliveries end with cesareans for medical indications. When a vaginal delivery must be completed operatively, it poses the most serious risks to the fetus and increases maternal risks as well. Compare the rates of intracranial hemorrhage in cesareans without labor to a number of other options, including cesarean in labor (*Table 1*).<sup>4</sup>

There is an increasing consensus that elective cesarean provides better outcomes for very-low-birth-weight babies delivered at less than 28 to 30 weeks' gestation. At the other end of the spectrum is the large infant. While better care and nutrition lead to bigger babies, these deliveries involve a greater risk of shoulder dystocia and/or failure to progress. Although we are fast approaching a time when three-dimensional ultrasound, coupled with pelvimetry, will allow us to estimate the risks of fetopelvic disproportion more accurately, there is still considerable margin for error.

Let's use breech presentations as an analogy. After a multicenter randomized trial of vaginal birth versus elective cesarean showed a clear benefit for the latter, the Society of Obstetricians and Gynecologists of Canada sent a letter to its members advising them to deliver all breech infants by cesarean "to minimize risks."<sup>5</sup> Despite that compelling recommendation, I believe few veteran obstetricians would deny a request for vaginal delivery

# Risk of fetal cerebral hemorrhage, by mode of delivery Mode of delivery

MODE OF DELIVERT	MISK
Cesarean with no labor	1:2,750
Spontaneous vaginal delivery	1:1,900
Cesarean in labor, with no attempt at vaginal delivery	1:954
Vacuum-assisted vaginal delivery	1:860
Forceps-assisted vaginal delivery	1:664
Cesarean after failed operative vaginal delivery	1:334
SOURCE: Towner D, Castro MA, Eby-Wilkens E, Gilbert WM. Effect of mode of delivery in nulli-	

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> from a multipara who previously had experienced an uneventful spontaneous delivery of a 4,500 g infant, provided the current breechpresenting baby had an estimated weight of less than 4,000 g at term. Why force a woman to undergo cesarean delivery if she accepts a 1% risk of devastating fetal injury with vaginal birth? Conversely, why force a primipara to deliver vaginally when she has been well informed of her options and decides that elective cesarean is best? Although some physicians and hospitals have gotten the courts to override the mother's wishes, it is probably just a matter of time before they and *continued on page 42*

the local authorities are successfully sued in federal court for violating her civil rights.

# The increasing safety of elective cesarean

In the past, when prenatal care was inadequate, elective cesarean or induction of labor often resulted in the delivery of premature



infants. Today, good care with early ultrasound can eliminate that threat.

When I trained as a physician, anesthesia for cesarean section carried significant risk. Today, it is

# Most women now prefer epidural anesthesia to the pains of labor and vaginal birth.

hard to argue that a 45-minute epidural during cesarean section poses more risks than the typically far longer periods of epidurals administered during vaginal births. In the current environment, who would deny a woman epidural anesthesia for vaginal birth for the absolutely correct reason that it adds risk?<sup>6</sup> Nor do third-party payers refuse to cover anesthesia, despite the fact that there is no "medical" indication for it. Pain relief is now considered a gravida's right.

In the United Kingdom and many other countries with good prenatal care, thromboembolism is the leading cause of maternal mortality. Although the risk of thromboembolism increases with cesarean section, it can be markedly reduced by using low-molecular-weight heparin for patients with identifiable risk factors such as obesity, smoking, immobility, and a personal or family history of deep venous thrombosis (DVT). In addition, testing for the Leiden gene (gene 20210A) and other thrombophilic factors could identify patients at highest risk.

For the fetus, the downside of elective cesarean is a small increase in mild respiratory problems, which usually are transient with good pediatric care. Still, we can hardly fault our pediatric colleagues for protesting that elective cesarean creates more work for them. It does do that, as risks and benefits are apportioned differently between mother and baby. Nevertheless, infants face the highest risk when attempted vaginal birth ends with any kind of operative delivery, be it forceps, vacuum extraction, or cesarean. To quote the FIGO ethics committee once more: "There is no hard evidence on the relative risks and benefits of term cesarean delivery for non-medical reasons as compared with vaginal delivery."2 Nor are we likely to ever see a prospective randomized study of elective cesarean at term versus attempted vaginal delivery.

I was recently surprised to learn that in Shanghai, Beijing, and other major cities in China, the overall cesarean delivery rate is 50%, with individual hospitals ranging from 35% to 70%. In Taiwan, the rate of cesarean delivery ranges from 30% to 50%. In contrast to the United States, where physicians and patients often creatively find a "medical" indication to placate payers or quality-assurance committees, the Chinese openly identify the major indication for cesarean as "social."

Since the typical Chinese woman has only 1 baby—possibly 2—she tends to seek early and consistent prenatal care and to select elective cesarean at term, believing these actions offer maximum benefit to both her and the infant. While there are no data refuting this belief, we also lack good data substantiating it. Nor do we have reliable evidence that cesarean rates are useful indicators of quality of care. We use them because they are easy to obtain. However, in the emerging world of evidence-based medicine, they lack validity.

Obstetrics is simultaneously blessed and cursed by the fact that so many elements of patient care can be quantified. As we move to electronic records, our ability to correlate seemingly unrelated elements will increase. Historically, we have focused on short-term, gross relationships between factors believed to influence the outcomes of different obstetrical practices. However, it would not surprise me to find a meaningful correlation between obstetrical outcome and the wheel bases of the cars in the patients' parking lot divided by their ages. Similarly, the number of native teeth in a gravida's mouth may be a valid predictor of prematurity and/or macrosomia and fetal outcome. I have not seen any studies on these topics. Nor have I seen a prospective analysis of maternal-fetal outcomes based on the signs of the zodiac at birth-one of the reasons some patients in China press for elective cesarean. I am simply emphasizing the importance of developing indicators for quality of care based on lifelong health outcomes for both mother and baby, as these would be far more meaningful than cesarean rates alone.

### **Protecting the pelvic floor**

Urogynecologists are amassing impressive evidence of the ravages to the pelvic floor caused by vaginal birth, as well as the apparent protective effect of elective cesarean.<sup>7</sup> This information also is leaking out to the public. In the United States, Europe, China, and Japan, most women now have only 1 or 2 babies.<sup>8</sup> These women frequently take a



long-range view of their health, as they anticipate living into their 80s. Many hope to avoid the bowel and bladder-control problems their mothers and For women who will have only 1 or 2 children, the risks of repeated cesareans are minimal.

aunts experienced. The result is an increasing number of requests—even demands—for elective cesarean delivery. I expect this trend to intensify before there is a reversal.

In the past, injury to the pelvic floor often took years to manifest itself, so physicians *continued on page 44*  were comfortably past the statute of limitations before it was detected. Today, transanal ultrasound can demonstrate such injury in the postpartum period.<sup>9</sup> The physician who denies a patient's request for cesarean section to preserve her pelvic integrity is now at risk if she has postpartum evaluation demonstrating subclinical injury that may cause problems in a few years.

In the absence of compelling indications for one approach over another, we should respect our obstetrical patients' opinions.

The experience of labor and vaginal delivery has lost the luster once accorded it. Given the choice, most women prefer epidural anesthesia to the pains of labor and vaginal birth. A recent survey showed that only 43% of obstetrical patients would feel deprived of an important life experience if they were delivered by cesarean.<sup>10</sup>

For women who will have only 1 or 2 children, the recognized risks of repeated cesareans are minimal. The risk of uterine rupture prior to labor also is low, as are the risks of placenta previa and accreta.

When the long-term costs of living with and/or treating pelvic-floor disorders are considered, the lower risk and expense traditionally associated with vaginal delivery probably disappears. Our patients are increasingly aware that pelvic-floor dysfunction need not be the inevitable price of motherhood.

## Conclusion

A final thought for those who believe that "nature's way" is best: Without obstetrical care, we would revert to the almost 1% maternal mortality rate that has been the norm throughout history. As evidence-based interventions further refine obstetrical care, the benefits of cesarean section for both mother and baby will continue to increase. We should not deny patients these benefits simply because of historical bias.

I am not advocating cesarean on demand.

No physician should be obligated to acquiesce to a patient's capricious demand. But neither should the patient be forced to follow the physician's command, as historically has been the case. To avoid a conflict, these issues should be discussed early in prenatal care and revisited as pregnancy progresses. Two questions should be answered as soon as possible: Would the patient agree to cesarean delivery for the sole indication of possible fetal benefit? Would the obstetrician perform a cesarean on request in the absence of a clear medical indication? If either party cannot accept an answer of "No," the patient should be advised to seek care elsewhere.

We also should remember that patients have greater and greater access to valid information via the Internet, making them more eager to participate in decision-making. Thus, we should assess patients carefully and share our findings with them as objectively as possible. In the absence of compelling indications for one approach over another, we should respect their opinions.

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The author reports no financial relationship with any companies whose products are mentioned in this article.