

# SYMPOSIUM ON ETHICAL ASPECTS OF PREGNANCY AND ASSISTED REPRODUCTION

1. Obstetrician-Gynecologist, Chief of the Critical Care Department of the Instituto Nacional Materno Perinatal, Lima, Peru. Professor of the Faculty of Medicine, Universidad Nacional Mayor de San Marcos. Vice-President of the Peruvian Society of Obstetrics and Gynecology. ORCID: 0000-0002-6962-2639

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**Corresponding author:**

Enrique Guevara Ríos

✉ enriqueguezvarios@gmail.com

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## Cesarean section at maternal request Cesárea a solicitud materna

Enrique Guevara Ríos<sup>1</sup>

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### ABSTRACT

Cesarean section is a life-saving intervention with medical indications. Cesarean section is clinically indicated when there is a significant risk of adverse consequences for the pregnant woman or the fetus. However, in recent years non-medical indications for cesarean section such as cesarean section by maternal request have emerged. This is a non-systematic review of cesarean section at maternal request. Cesarean delivery at mother's request compared to planned vaginal delivery is a multifaceted and complex issue, the data are minimal and mostly based on indirect comparisons, and its implications for women of childbearing age, health professionals and society are unknown. For physicians, performing cesarean section for non-medical reasons is a professional decision, the ethics of which is being debated without sufficient evidence on the risks and benefits.

**Key words:** Cesarean section, Cesarean section at maternal request

### RESUMEN

La cesárea es una intervención que salva vidas y que tiene indicaciones médicas. La cesárea está clínicamente indicada cuando existe un riesgo significativo de consecuencias adversas para la gestante o el feto. Sin embargo, en los últimos años se han presentado indicaciones no médicas para la cesárea, como es la cesárea por solicitud materna. Se hace una revisión no sistemática sobre la cesárea a solicitud materna. El parto por cesárea a solicitud de la madre en comparación con el parto vaginal planificado es un tema multifacético y complejo, los datos son mínimos y en su mayoría se basan en comparaciones indirectas, desconociéndose sus implicaciones para las mujeres en edad fértil, los profesionales de la salud y la sociedad. Para los médicos, practicar una cesárea por razones no médicas es una decisión profesional, cuya ética se está debatiendo sin pruebas suficientes sobre los riesgos y los beneficios.

**Palabras clave.** Cesárea, Cesárea a solicitud materna

### INTRODUCTION

The Bulletin of the Latin American Federation of Obstetrics and Gynecology of December 2022 publishes the realization of a webinar on 'The principle of autonomy in the choice of the route of birth'. The event analyzed the subject from the point of view of bioethics within the practice of Obstetrics and made it possible to define the possible criteria for decision making when faced with the dilemma: delivery or cesarean section, given that every day there are more frequent cases of cesarean section at the request of the mother. The obstetrician-gynecologist must weigh his scientific and technical knowledge, the institutional regulations in force and his own experience against the personal criteria of the pregnant woman linked to her autonomy and human rights. The obstetrician-gynecologist will make the best decision to achieve the best results for the pregnant woman and the newborn, in addition to the personal satisfaction for his unquestionable way of acting<sup>(1)</sup>.

This article is a non-systematic review of the current scientific evidence on cesarean section on request.

### DEVELOPMENT OF THE TOPIC

Childbirth is a profound and intense human experience. Women's descriptions of childbirth often refer to feelings of empowerment, euphoria, and accomplishment, especially after vaginal delivery without medical interventions. Other women associate childbirth with trauma, loss of control, fear, pain and anxiety.



It is possible that the childbirth experience contributes to women's ability to adapt to motherhood, although there is only indirect evidence for this. It has been shown that women who give birth in a supportive context have higher self-esteem, greater maternal self-confidence, more positive parenting practices, and less anxiety and depression after childbirth<sup>(2)</sup>.

Cesarean section is a lifesaving and medically indicated intervention. Cesarean section is clinically indicated when there is a significant risk of adverse consequences to the pregnant woman or fetus if the intervention is not performed at a particular time<sup>(3)</sup>. Although there is a worldwide trend of increasing cesarean section rates, these vary considerably between and within countries<sup>(4)</sup>.

However, the practice of cesarean section for less precise medical indications and for non-medical reasons, such as maternal request, is increasing in many hospitals or clinics. Cesarean sections for non-medical indications may be performed for reasons other than the risk of adverse consequences, if those assessing the risk consider the physical or psychological benefits to be more important. There is no evidence from randomized controlled trials on which to base a recommendation for practice regarding planned cesarean section at term for nonmedical reasons<sup>(4)</sup>.

It has been suggested that a proportion of women requesting cesarean section for nonmedical indication may possibly have been influenced by previous or current psychological trauma, such as sexual abuse or a previous traumatic delivery or fear of vaginal tearing. These could legitimately be considered clinical indications<sup>(5)</sup>.

In a study of thirty-three pregnant women who were interviewed about requesting cesarean section without medical indication, 28 of them referred experiences of previous deliveries and feared mainly the pain of delivery and the life and health of the child. The most frequent fear of five nulliparous women was vaginal tearing. After counseling or psychotherapy, 14 women chose vaginal delivery and 19 had elective cesarean sections, three by obstetric indications and 16 by their own choice<sup>(6)</sup>.

Several studies report that leading American and British obstetricians claim that cesarean section is as safe or nearly as safe as vaginal de-

livery, eliminates pelvic floor damage and consequent symptoms caused by vaginal delivery, is safer for the baby, and is desired by many women; however, abundant evidence in the medical literature refutes the validity of these claims<sup>(7,8)</sup>.

The available evidence from retrospective and prospective studies is limited, uses different definitions of 'maternal request' and reports rates between 1%-48% in public health systems and 60% in the private sector<sup>(9)</sup>.

Two systematic literature reviews in different populations have highlighted methodological, conceptual and cultural aspects that could influence women's preferences for vaginal or cesarean delivery.

There is little evidence available that there is a growing cultural acceptance of cesarean delivery. More qualitative research investigating the influence of obstetric and psychosocial factors on women's views of vaginal and cesarean delivery is needed<sup>(10,11)</sup>. The actual number of women who request cesarean delivery without precise indications for themselves or their children is unknown. However, a percentage of women currently undergo cesarean section at term for non-medical reasons, although the evidence regarding the risks and benefits is the subject of intense debate among professionals<sup>(12)</sup>.

Planned cesarean section by breech presentation compared with planned vaginal delivery reduced perinatal or neonatal death as well as the composite outcome of death or severe neonatal morbidity, at the expense of slightly increased maternal morbidity. In a subset with 2-year follow-up, infant medical problems increased after planned cesarean section and no difference was found in long-term neurodevelopmental delay or the outcome 'death or neurodevelopmental delay,' although the numbers were too small to exclude the possibility. of a major difference in either direction.

Benefits must be weighed against factors such as maternal preference for vaginal delivery and risks such as future pregnancy complications in the woman's specific health care setting. The data from this review cannot be generalized to settings where cesarean section is not readily available, or to methods of breech delivery that differ materially from the clinical delivery pro-



ocols used in the trials reviewed. Research is needed on strategies to improve the safety of breech delivery and to further investigate the possible association of cesarean section with infant medical problems<sup>(13)</sup>.

Preterm delivery at 37 weeks' gestation compared with ongoing expectant management for women with an uncomplicated twin pregnancy does not appear to be associated with an increased risk of harm, findings that are consistent with recommendations from the UK National Institute for Health and Care Excellence (NICE) advocating delivery of women with a dichorionic twin pregnancy at 37 + 0 weeks' gestation. It is unlikely that there is sufficient clinical balance to allow randomization of women to a later gestational age at birth<sup>(14)</sup>.

#### ARGUMENTS IN FAVOR OF CESAREAN SECTION AT THE MOTHER'S REQUEST

- There is the perception of maternal and fetal benefits, such as convenience and social planning - since most women are planning to have only 2 children - and the convenience of scheduling the day of delivery. Peer pressure is also mentioned, because cesarean section is widely used by celebrities and there is talk of vaginal birth being 'archaic'. Even the term 'tokophobia' is mentioned, which is defined as the fear of childbirth or pregnancy usually due to a history of sexual abuse, traumatic childbirth.
- Fetal benefits include avoiding risks such as stillbirth, prematurity, cerebral palsy and fetal trauma; and maternal benefits include avoiding risks, since the risk-benefit ratio associated with surgical intervention has evolved along with improved techniques for surgical intervention, anesthesia, infection control and blood banks, as well as avoiding emergency cesarean sections during labor, which are associated with increased morbidity and mortality.
- Avoidance of pain during labor has also been cited as a potential maternal benefit of planned cesarean delivery, and is antecedent to previous experience of traumatic delivery, pelvic floor problems, genital prolapse, urinary incontinence, instrumental delivery, and fecal incontinence.

- Respect for the choice of the pregnant woman or the autonomy of the woman's decision is probably one of the most important factors. And it is more frequent in highly interventional settings where the use of artificial oxytocin, electronic fetal monitoring, epidural analgesia, artificial rupture of membranes and instrumented deliveries are common, where adverse outcomes may be greater.
- The ability to schedule cesarean sections allows physicians to plan staffing on an as-needed basis, perform the intervention during daytime hours, and likely reduce the incidence of litigation associated with vaginal delivery or emergency cesarean sections. It would also help avoid criticism from colleagues of alleged medical malpractice, little time for guidance/counseling, time for surgery, and financial gain<sup>(3)</sup>.

#### ARGUMENTS AGAINST A CESAREAN SECTION AT THE MOTHER'S REQUEST

- Mainly there is the increased risk of maternal mortality, which some studies report to be 3.8 times higher in a cesarean section than in a vaginal delivery. The mortality rate of planned cesarean section in the United Kingdom from 1994 to 1996 has been calculated and was estimated to be almost three times higher than that of vaginal deliveries.
- There is also increased morbidity due to increased blood loss, increased risk of transfusion, postoperative infection, thromboembolism and pulmonary embolism. The case fatality rate for all cesarean sections is six times higher than for vaginal delivery; the rate is almost three times higher even for elective cesarean section. These differences are highly significant. In the absence of other evidence (e.g., from randomized controlled trials of different modes of delivery), it is not appropriate to be dogmatic about best practice, but all involved should take very seriously any decision to perform major surgery with an associated mortality<sup>(15)</sup>.
- Although cesarean section is considered a simple and safe procedure, the intervention has its risks. A study of 221 consecutive cesarean sections at a large London teaching hospital has shown that maternal morbidity is common



after cesarean section. Problems with anesthesia, hemorrhage, paralytic ileus, wound problems, and infectious complications were common, and the complications were often unrelated to the condition that led to the indication for cesarean section. Postpartum hospital stay was greatly increased by cesarean section and further prolonged by postoperative complications. Fortunately, in modern obstetric practice maternal mortality is rare and therefore it is important to assess morbidity to measure the success of this procedure. This study shows that there is significant morbidity associated with cesarean section<sup>(16)</sup>.

- Cesarean section has social inconveniences, such as longer hospitalization time and greater restriction in daily activities. Difficulties in breastfeeding are also mentioned<sup>(17,18)</sup>.
- There are several studies that mention that after cesarean section there is a greater frequency of problems in the following pregnancy, such as hemorrhages in the second half of pregnancy due to placenta previa, placental accretism, uterine rupture, adhesions, and decreased fertility<sup>(19)</sup>. Other long-term risks are ectopic pregnancy, hemorrhage and hysterectomy after uterine evacuation, implantation endometriosis, adenomyosis and increased hospital readmission<sup>(20,21)</sup>.
- Cesarean section has also been associated with emotional difficulties, such as postpartum depression and negative feelings about the birth experience, not specifically among women who choose to deliver by cesarean section<sup>(22,23)</sup>.
- Among the fetal and neonatal risks, studies mention an increased likelihood of neonatal respiratory distress syndrome, transient tachypnea of the newborn, fetal laceration, and increased likelihood of decreased breastfeeding<sup>(3)</sup>.
- It has been suggested that neonatal risks that increase with cesarean delivery include increased admission to neonatal units/separation of the mother from the newborn, iatrogenic prematurity, tearing, increased neonatal respiratory problems, and stillbirths in the subsequent pregnancy<sup>(24-27)</sup>.
- From an economic point of view, the costs of cesarean section are twice that of a vaginal delivery. An economic model developed to determine the cost to the National Health Service of scheduled cesarean section in the absence of medical indication estimated this to be between £10.9-£14.8 million per year; the average cost saving of performing a scheduled vaginal delivery instead of a scheduled cesarean section was £1,257 per birth<sup>(28)</sup>.
- However, in the U.S., the costs of increased intervention in vaginal deliveries, especially the addition of oxytocin, appear to override the cost differences between the two modes of delivery. According to one study, if epidural anesthesia is also used, total costs exceed the cost of scheduled cesarean delivery by almost 10%<sup>(29)</sup>.

#### PHYSICIANS' ATTITUDES TOWARD REQUESTING CESAREAN DELIVERY FOR AN UNCOMPLICATED TERM PREGNANCY

There are differences among physicians on the non-medical reasons for a cesarean section. In the United Kingdom and Germany, a high percentage of physicians indicate that the main reason is the woman's right to choose the type of delivery (79% and 75%, respectively) and having a previous cesarean section (98% and 92%), as well as a history of a previous traumatic vaginal delivery (99% and 97%), fetal death in childbirth (98% and 94%) and disabled first child (94% and 96%). In Spain, France and the Netherlands, the right to choose (15%, 19% and 22%, respectively), as well as fear of childbirth (10%, 14%, 30%) are much lower. It seems that previous cesarean section and previous traumatic vaginal delivery is an accepted reason between 38%-86% for Italy, Spain, France, Holland, Luxembourg and Sweden. When it comes to a colleague requesting cesarean section, physicians in these countries accept the request for cesarean delivery between 21%-78%<sup>(30)</sup>.

The main reasons for physicians to support the woman's choice for cesarean delivery, regardless of other medical or non-medical indications, are respect for the woman's autonomy, avoidance of possible problems during delivery and avoidance of possible legal consequences<sup>(30)</sup>.



According to the International Federation of Gynecology and Obstetrics (FIGO), there is ethical concern throughout the medical profession about the increasing rate of cesarean deliveries. Cesarean section is more expensive than a normal delivery and as a surgical intervention has more potential dangers for mother and baby. Physicians have a professional duty to do no harm to their patients, which includes a moral obligation to take care to use health care resources appropriately. Physicians are not obligated to perform a procedure for which there is no certain medical benefit. There is currently no conclusive evidence on the risks and benefits of cesarean section for nonmedical reasons compared with vaginal delivery at term<sup>(31)</sup>.

The available evidence suggests, as described above, that vaginal delivery is safer in the short and long term for both mother and child. Physicians have a duty to inform and counsel women on these issues.

There may be four possible positions when considering a request for an elective cesarean section in a pregnancy without other complications. The first is for the physician to recommend elective cesarean section to the woman during vaginal delivery with the available evidence to support this position, i.e., a medically indicated cesarean section. Or it may be the case that the physician recommends vaginal delivery with the available evidence to support this position, i.e., the physician refuses to perform a cesarean section for non-medical indications. A third position is that the physician considers vaginal delivery and elective cesarean section to be equivalent, with evidence to support this position, allowing the woman's choice. And a final position would be for the physician to consider the available evidence to be uncertain as it does not support any particular type of delivery, so the woman's choice may be allowed<sup>(3)</sup>.

In conclusion, cesarean delivery at the mother's request compared to planned vaginal delivery is a multifaceted and complex issue; published data are minimal; they are mostly based on indirect comparisons and their implications for women of childbearing age, health professionals and society are unknown.

Most indirect outcome studies do not adequately adjust for confounding factors and, therefore, should be interpreted with caution.

In the absence of trial data, there is an urgent need for systematic review of observational studies and synthesis of qualitative data to better assess the short- and long-term effects of cesarean and vaginal delivery.

In the absence of maternal or fetal indications for cesarean delivery, a plan for vaginal delivery is safe and appropriate and should be recommended.

After exploring the reasons behind the patient's request and discussing the risks and benefits, if the expectant mother decides to request a cesarean - a subjective and very personal decision - the following is recommended: in the absence of other indications for early delivery, a cesarean delivery should not be performed at maternal request before 39 weeks gestational age. And, given the high rate of repeat cesarean deliveries, patients should be informed that the risks of placenta previa, placenta accreta spectrum and gravid hysterectomy increase with each subsequent cesarean delivery. For physicians, performing a cesarean section for non-medical reasons is a professional decision, the ethics of which are being debated without sufficient evidence on the risks and benefits.

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