

Should Doctors Perform an Elective Caesarean Section on Request?

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Abstract

The incidence of caesarean sections performed on request without medical indications is rising. The reasons for this are not only for perceived medical benefit, but are also due to social, cultural and psychological factors. Despite dramatic improvements in the safety of anaesthesia and surgery, mortality and morbidity are greater for elective caesarean sections compared to vaginal deliveries. An association exists between pelvic floor damage and childbirth, but this cannot be attributed entirely to vaginal deliveries and does occur even after a caesarean birth. The incidence of late intrauterine deaths is unlikely to be reduced by a policy of universal elective caesarean section, as these procedures carry a risk of iatrogenic fetal morbidity and mortality. The legal and ethical issues of request caesarean sections are complex. The validity of informed consent for non-indicated surgery is unclear. An individual has his/her rights and so does society. When society's rights are judged to have priority, the individual's right becomes a privilege. Based on this principle, maternal request caesarean sections must not compromise the provision of care to women requiring medically-indicated caesarean sections or should not dent the resources of public healthcare. In dealing with requests for caesarean sections, obstetricians should establish the reasons for the request and provide clear, unbiased information based on the best available evidence. Individualised modifications to the management of labour may allow some women to have vaginal deliveries. A second opinion from a colleague may help the patient to reconsider the request and make a more informed choice.

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Introduction

Caesarean sections performed without medical indication, better known as maternal request caesarean sections, have generated intense debate in recent times. While uncommon in the past, a recent national audit in the United Kingdom (UK)¹ revealed that 7% of all elective caesarean sections were performed for precisely this reason. Though no figures are available, by virtue of enjoying developed nation status and having a similar quality of medical care to the UK, the situation in Singapore may be no different. In the greater context, the world is witnessing a pandemic of caesarean sections that has left virtually no country spared. Though the reasons for these are complex, at least a proportion of these can be attributed to maternal request caesarean sections. Historically, rapid advances in asepsis, surgery and anaesthesia have contributed to the fascinating evolution of the caesarean section. The operation is only 100 years old; yet it has evolved from a dangerous procedure performed to save a mother's life, when the fetus was already dead, to a relatively safe one that is utilised to ensure both fetal and

maternal well-being. This shift in the balance of benefit versus harm in a caesarean section, as compared to a vaginal birth, has logically resulted in a lowered threshold for caesarean sections. Evidence of possible social and medical benefits of operative delivery have led to an increasing perception that it may even be preferable. This is not exclusively a view of the lay person. In a much publicised study,² 31% of female obstetricians in London declared that they would choose an elective caesarean section for themselves. Not surprisingly, 69% of obstetricians,³ when faced with a woman requesting a caesarean section, would comply with such a wish. The emergence of the maternal request caesarean section, as an entity, results from both the willingness of women to accept this intervention as well as the willingness of their obstetricians to accede to this request.

Why do Women Request Caesarean Sections?

While the reasons for this are varied, their elucidation is the key towards understanding and tackling this issue.

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Women who request caesarean sections perceive it to confer an overall benefit on the birth process; yet in many instances, this is a belief not substantiated by fact. Protection of the pelvic floor is a frequently cited reason for requesting a caesarean section. This was the basis on which the female obstetricians² in London in the previously mentioned study made their choice. The belief that childbirth inevitably damages the pelvic floor, and that caesarean sections can effectively prevent subsequent incontinence, prolapse and sexual dysfunction, is often tempered by strong cultural and peer pressures. In some countries, such as Brazil, this has led to caesarean section rates⁴ in excess of 80% in some private hospitals. As will be discussed later in this review, there is controversy surrounding the aetiology of pelvic floor dysfunction arising after pregnancy, and the cause of this may relate to pregnancy rather than labour and delivery. Another possible reason for maternal request caesarean section is social convenience. Labour is variable in nature, onset and outcome. Mothers who work will attest to the difficulties of arranging childcare at short notice when they go into labour and of planning a period of absence from work. In Singapore, maternity leave entitlements are shorter in duration compared to many western countries and this places pressure on women to work until the onset of labour. An elective caesarean section affords them the luxury of scheduling their absence from work. It avoids “wasting” maternity leave which may have to be consumed in late pregnancy by some women who feel unable to work at that stage. Despite the possible conveniences that elective caesarean sections offer, this does not appear to be the main reason for maternal request caesarean sections as most pregnant women are aware of the debilitating effects of major surgery.⁵ The prospect of labour and subsequent delivery is understandably frightening, particularly to nulliparous women who have had no prior experience of it. In a small group of women, a morbid fear of labour and childbirth, sometimes termed tokophobia,⁶ leads to a request for an elective caesarean section. Tokophobia may occasionally be the result of child sexual abuse, rape or a manifestation of depression. Secondary tokophobia may occur as a result of a previous traumatic delivery.

Maternal Considerations

Is a vaginal delivery safer than an elective caesarean section? Extrapolated estimates from the confidential enquiries into maternal deaths in the UK,^{7,8} a triennial report on all maternal deaths in England, Scotland and Wales, suggest that the mortality from an elective caesarean section is 3 times higher than in a vaginal birth.⁹ Proponents of maternal request caesarean section point out that the mortality data for elective sections are drawn largely from a population of women who have valid medical indications for the operation. These medical indications may adversely

affect maternal outcome. Safety data on elective caesarean sections on request in women with no intercurrent medical conditions are not available and may well show it to be safer than elective caesarean sections in general. Nevertheless, numerous studies have recorded the higher risk of caesarean sections, not all of which can be accounted for by complications which necessitated the operation.¹⁰⁻¹³ Morbidity is a less tangible aspect of safety that is difficult to quantify. The established view is that vaginal delivery carries less morbidity and recovery from it is quicker. Haemorrhage, infection, paralytic ileus, pulmonary embolism and Mendelson’s syndrome are only a few possibilities on the formidable list of complications that may occur as a result of caesarean section. The prevalence of hysterectomy due to haemorrhage after caesarean section is 10 times higher than in vaginal births.¹⁴ Pulmonary embolism remains a leading cause of maternal mortality in the developed world and this complication is far more likely to occur following a caesarean section. Even if venous thromboembolism does not kill, it does contribute to morbidity as extensive investigations, hospitalisation and long-term medication for anticoagulation are often necessary. Long-term morbidity, in the form of adhesion formation and uterine rupture, may also adversely affect a subsequent pregnancy. There is evidence of decreased fecundity, increased risk of ectopic pregnancies, placenta praevia and worse infant outcome in subsequent births.¹⁵

An often cited benefit of caesarean sections is the apparent protection it confers on the muscles of the pelvic floor. Undeniably, there is an association between pregnancy and pelvic floor disorders, such as urinary and faecal incontinence and prolapse. Ultrasound findings suggest that anal sphincter disruption occurs in 33% of women undergoing an uncomplicated spontaneous vaginal delivery.¹⁶ This figure seems alarmingly high, particularly in a group of women in whom overt sphincter damage has not occurred. This has prompted some obstetricians to recommend universal elective caesarean sections.¹⁴ While this may appear to be a reasonable strategy by simple logic, the weight of current evidence does not suggest that avoidance of a vaginal birth is completely protective. Much of the pelvic floor weakening may be due to pregnancy. Urinary incontinence commonly starts in pregnancy and rarely, if ever, after childbirth.^{17,18} In a population of women who have been delivered exclusively by caesarean section, protection against subsequent incontinence is only apparent in women who have had 1 child.¹⁹ When repeat caesarean sections are performed, all protection is lost and more than a third of women who have had 3 caesarean sections report urinary stress incontinence.¹⁹ Similar arguments can be raised in considering the role of vaginal delivery in the causation of faecal incontinence. The prevalence of faecal incontinence in one large study was 6% during pregnancy

and only 5.5% after delivery, suggesting that all or most of the causation could be attributed to pregnancy.²⁰ It has also been suggested that instrumental deliveries, particularly forceps deliveries,¹⁶ long second stages with consequent nerve damage²¹ and unnecessary episiotomies²² are the true culprits in pelvic floor damage. Strategies to avoid these predisposing factors may have a greater impact in the prevention of faecal incontinence than further increases in caesarean section rates.

Neonatal Considerations

It is common belief that an elective caesarean section carries no risk to the neonate. There is, in addition, a growing number of women and some obstetricians who regard elective caesarean sections as being protective against perinatal death. The belief stems from the knowledge that there is 1 intrauterine death between 38 weeks and delivery in 600 pregnancies.²³ These largely unexplained stillbirths are distressing, especially since antecedent events are usually absent and, therefore, a strategy to prevent them cannot be devised. Proponents of maternal request caesarean section argue that an elective caesarean section at 38 weeks would prevent these intrauterine deaths. It is further postulated that 1 death in 1500 neonates >1.5 kg in labour,²⁴ 1 case of hypoxic ischaemic encephalopathy in 1750 births and 10% of cases of cerebral palsy²⁵ would be avoided by a policy of elective caesarean section. These estimates are based on the risks of adverse fetal outcomes associated with labour. This argument for elective caesarean section is flawed by virtue of the fact that it disregards the possibility of iatrogenic fetal damage and makes the assumption that abdominal delivery will circumvent all the risks associated with labour. We are reminded by the findings of large series of elective caesarean sections that normal babies do die after elective caesarean sections. This was as high as 1.6% in the term breech trial²⁶ and 0.5% in 1 observational study²⁷ of repeat caesarean sections.

Even if we accept that fetal loss from caesarean sections is rare, the risk of fetal morbidity cannot be ruled out. Respiratory distress syndrome and transient tachypnoea in the newborn are more common after delivery by caesarean section.²⁸ This is particularly so if the woman has not laboured. In addition, elective caesarean sections are scheduled based on the expected date of delivery (EDD). When the EDD is uncertain, a proportion of caesarean sections may inadvertently be performed prematurely, resulting in a further increase in neonatal respiratory complications. Fetal lacerations sustained at the time of caesarean section are not rare. In 1 study, this was documented in 1.4% of all vertex presentations.²⁹ The analytical difficulty is that elective caesarean section numbers are small, with less than 10% of deliveries occurring by this route. Hence, unless large numbers of these

pregnancies are studied, the relative incidence of rare adverse outcomes and death in comparison to labour and vaginal delivery would not be readily apparent.

Ethical/Legal Considerations

Obstetricians are continually reminded that interventions carry risks and must to be clinically justified. Women have to give valid and informed consent to undergo such procedures, even when a procedure is clearly beneficial. Similarly, the General Medical Council in the UK states that patients have the right to refuse intervention “even when a refusal may result in harm or death”.³⁰ However, a distinction needs to be made between this negative right to refuse treatment and the positive right to insist upon an intervention that the doctor is obliged to provide. From the legal standpoint, it is unclear whether such a positive right exists. In the context of maternal request caesarean sections, the medical fraternity runs the risk of becoming confused about the negative right to refuse an intervention (refusing to have a caesarean section when medically indicated) and non-existent but postulated positive rights to have a non-indicated intervention (the maternal request caesarean section). The former has to be honoured regardless of outcome while the latter can, and perhaps should, be refused.

Legal considerations aside, the obstetrician is duty-bound to ensure that his/her actions are ethically correct. The FIGO Committee for the Ethical Aspects of Human Reproduction has argued that it is unethical to perform a caesarean section without a medical indication because of inadequate evidence to support a net benefit.³¹ In their deliberations, FIGO distinguishes between the individual's rights and the rights of society. When the rights of society are deemed to be of greater importance than the individual's rights, the latter becomes a privilege. The rights are the same for a woman in any country, but the privilege varies. In a resource-poor country with socialistic healthcare, performing elective caesarean sections for non-medical reasons may override the rights of society if insufficient resources remain to provide for medically indicated caesarean sections and may be refused for that reason alone. In a developed country with ample resources, this privilege may be allowed. While this assertion may be acceptable, it still leaves us with the dilemma of whether to oblige and provide that privilege, especially if the woman is prepared to pay. As obstetricians, we have to contend with the difficulty of decision-making as the balance of benefit versus harm between caesarean section and vaginal delivery is crucial to this debate. Hence, performing an elective caesarean section would be ethically sound if it was genuinely safer or more beneficial than labour and vaginal delivery. Refusal to perform one would seem reasonable if the intervention was more likely to result in

harm than good. When the set of risks for an intervention and the set of risks for refusing the intervention (and allowing the natural course of events to take place) are perceived to be similar in magnitude, the patient's choice can be reasonably included in the equation. Perhaps this third scenario best sums up the ethical ground on which the maternal request caesarean section stands. No general surgeon would agree to perform a total colectomy in a patient with no colonic pathology just as no gynaecologist would agree to perform a hysterectomy for a healthy 20-year-old woman. Yet, 69% of obstetricians would perform a caesarean section for maternal request.³ This can only mean that these obstetricians believe that the risks of caesarean section are so close to the risks of labour and vaginal delivery that maternal choice can be allowed to influence this decision.

What Should Obstetricians do When Faced with a Request for Caesarean Section?

Clearly, there are arguments for and against the maternal request elective caesarean section. Women will continue to come forward and request for this intervention when, in their own assessment, the benefit of the procedure outweighs its risks. The actual incidence of maternal request sections is, therefore, also dependent on how obstetricians deal with these requests. We propose 3 steps to manage these requests.

Listen

The first and most important step is to listen. It is essential to establish why this request is being made and the sources of information that have led the woman to make this request. In multiparous women, events surrounding previous pregnancies and deliveries are of utmost importance as negative prior experiences may have played a role in influencing her choice.

Inform

Once the reasons for the request have been established, the obstetrician should give clear and unbiased information about the validity of the reasons provided by the woman to support her request and the established benefits and disadvantages of an elective caesarean section. Clinicians are invariably influenced in their outlook by anecdotal experiences and personal opinions. Every effort should be made to provide only information that has been scientifically proven to be true and to make known the aspects for which benefit or harm are unclear.

Formulate a Plan

This step is dependent on how the information provided in the previous step is received. Women who feel that their prior decision was based on misconception will often agree to labour, with a view to vaginal delivery, without

reservation. Others may be concerned about particular aspects of the birth process and individualised modifications to the management of their labour may allow them to attempt a vaginal delivery. In women who have had difficult previous instrumental deliveries, for instance, an undertaking to avoid instrumental deliveries in this pregnancy will allow many to achieve vaginal deliveries. Others may be satisfied with measures like avoiding induction, setting a maximum duration of labour or effective pain relief such as epidural analgesia. In women who still want a caesarean section, the obstetrician may feel that carrying out this request is justified. This may be particularly so in women who have suffered previous traumatic experiences, such as the intrapartum death of a baby. While it is true that such events are not prevented by caesarean section, the psychological stress faced by such women can be very debilitating. Obstetricians who feel that, in good conscience, they cannot agree to an elective caesarean section on the basis of the reasons provided by these women should refer these women to a colleague for a second opinion. This is good practice as it reinforces to women that, despite this refusal, we remain committed to their care. This measure also ensures that meaningful dialogue can continue and that bias and bullying are avoided.

Conclusions

The management of women who request caesarean sections is difficult. The issues are not limited to medical matters. Legal and ethical implications are also present. Obstetricians are further impaired by the lack of meaningful data which can be used to make rational decisions. This is particularly true of long-term effects of caesarean sections on mother and child, and how these compare to labour and vaginal delivery. Still, much progress can be made by the provision of clear, concise information that is free from biases and half-truths. This is our utmost responsibility. Even so, provision of information alone is insufficient. It has been suggested that "a physician who merely spreads an array of vendibles in front of the patient and then says, go ahead and choose, it's your life"³² is guilty of shirking his duty and may amount to malpractice. At present, there is no evidence to suggest that elective caesarean section is safer or better than vaginal delivery. Indeed, if there were, all women must be offered a caesarean section. This basic fact should be conveyed in our discussion with women. The ethics of informed choice for non-indicated surgery is complex. Still, there is hope that a common ground can be reached after discussion between obstetrician and woman has taken place. The process of how the final decision is made, whether it is to have a caesarean section or a vaginal delivery, is as important as carrying out the decision that was reached.

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QUESTIONS

1. These were found to be important to women who request caesarean section:
 - a) Perception that caesarean section may avert subsequent sexual dysfunction that may arise from natural childbirth.
 - b) In Singapore, longer maternity leave entitlements are given to patients who opt for caesarean section.
 - c) Peer and cultural pressure.
 - d) Morbid fear of labour and childbirth is quoted by the majority of such patients as the underlying motivating factor.
 - e) Perception that caesarean section confers an overall benefit on the birth process.

 2. Regarding maternal risks for caesarean section, the following is true:
 - a) Elective request caesarean sections are safer and less morbid to the mother than vaginal delivery.
 - b) Avoidance of vaginal birth is completely protective of pelvic floor weakening and disorders.
 - c) Prevalence of hysterectomy due to haemorrhage after caesarean section has been found to be 10 times higher than in vaginal births.
 - d) Evidence from the UK suggests that mortality from an elective caesarean section can be 10 times higher than in a vaginal birth.
 - e) Caesarean section may increase risk of ectopic pregnancies and placenta praevia, and decreased fecundity in subsequent births.

 3. The following neonatal considerations are true when elective caesarean section is chosen:
 - a) Perinatal deaths and adverse fetal outcome traditionally associated with labour and vaginal deliveries can be largely avoided.
 - b) Respiratory distress syndrome and transient tachypnoea in the newborn are less common after elective caesarean section.
 - c) Iatrogenic prematurity is a potential risk factor because of uncertainty in EDD in some women.
 - d) Lacerations of newborn are rare with elective caesarean section, at the rate of 0.14%.
 - e) Infant outcome in subsequent births following an elective caesarean section may be compromised.

 4. In the ethical/legal considerations for caesarean section, the following is correct:
 - a) From the legal standpoint, it is clear that the pregnant lady has the positive right to insist upon an intervention that the doctor is obliged to provide.
 - b) The FIGO Committee for the Ethical Aspects of Human Reproduction has argued that it is unethical to perform caesarean section without a medical indication because of inadequate evidence to support a net benefit.
 - c) When informing the patient, it is not useful to make known the aspects for which benefit or harm are unclear.
 - d) When the set of risks for an intervention and the set of risks for refusing the intervention are perceived by the attending obstetrician to be similar in magnitude, it can be argued that the patient's choice can be reasonably included in the equation.
 - e) It is good practice for obstetricians to discuss and clarify misconceptions about caesarean section and delivery, and offer alternative safer management of labour before acceding to all requests for elective caesarean section.

 5. Elective caesarean section performed without medical indication:
 - a) makes up 20% of all elective caesarean sections in the UK.
 - b) is the delivery mode of choice by most London female obstetricians.
 - c) is now readily done by every obstetrician.
 - d) is often requested as a result of tokophobia.
 - e) is acceptable to obstetricians for protection of pelvic floor.
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