

# Cesarean section on request

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## ABSTRACT

Obstetricians are facing a tide of non-medically indicated requests for cesarean section. Risks and benefits of accepting cesarean section on request are discussed.

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**T**raditionally it has been considered inappropriate for women to have an elective cesarean section (C/S) on request in an uncomplicated pregnancy. In 1985 when the New England Journal of Medicine published an article advocating elective cesarean delivery on request. It was provocative thought at a time where all efforts were concentrated on reducing the fast escalating C/S rate.<sup>1</sup> Two decades down the line there appears to be a consensus among obstetricians that all women who request an operative elective delivery should be offered counseling. This is in accordance with the advice of the International Federation of Gynecology (FIGO),<sup>2</sup> which states that performing a C/S for non-medical reasons is ethically unjustified. This, it must be noted, is not the same as non-obstetric reasons.

It has been a while since hospitals were proud to announce very low C/S rates. At that time C/S was performed for obstetric or medical indications. During the last 3 decades large strides were achieved in neonatal care, anesthesia, blood transfusion, antibiotic therapy and thromboprophylaxis. All of which have changed C/S from a procedure associated with considerable risk to one of low morbidity and even lower mortality leading to a lowering in the threshold for performing the operation. Where a trial of scar was considered mandatory due to the complications of the operation it has now become rather a patient's choice, with emphasis on how much they psychologically accepts labor.

Lately, a totally new indication entered the equation. Maternal request!! Globally, C/S on request is gaining popularity for good reasons. Female obstetricians were the first to be documented as requesting elective C/S on maternal request.<sup>3</sup> Their situation may be biased as far as the general public is concerned as they usually start their family later and expect to have fewer deliveries. Edwards and Davies<sup>4</sup> showed that 14.5% of women opted for an elective C/S on maternal request. The main reasons being to avoid prolonged labor and fetal well-being. In contrast, Asian women seem to prefer vaginal deliveries. In Singapore with a mixed Asian population of Malay, Chinese and Indians only 3.7% preferring an elective C/S on maternal request. The reason for the request was pretty similar to the United Kingdom's (UK) mothers.<sup>5</sup> Each region may have different rates of maternal request for C/S. Part of the assessment of any obstetric unit would include their C/S rate. This has recently been affected by consensus on how a breech should be delivered. Will this rise persist with the rising trend of maternal request for C/S.

On questioning obstetricians in UK in 1999, 69% of consultants said they would agree to a maternal request for C/S with no clinical indication. Of these, 60% feel that their practice has changed recently.<sup>6</sup> Irvine in North Thames region of England concluded that maternal request for C/S is patient and not obstetrician led.<sup>7</sup> All of the above prove that C/S on request is no longer a marginal or

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extreme idea. Women's expectations of having fewer children at a later age aside from an increase in patient's access to information; therefore, more autonomy makes it more acceptable to a bulk of obstetricians. The perceived risks to mother and child who had no medical complications and did not go through labor, could partially be refuted by the breech trial, the risk of perinatal or neonatal death or of serious neonatal morbidity was significantly lower in the planned cesarean group, with no significant increase in the risk of maternal death or serious maternal morbidity.<sup>8</sup> A C/S may have some potential benefits over vaginal delivery, and it is hard to refuse a well-informed woman an elective C/S on request even if it leads to a further rise in the rate of C/S.

**Perceived benefits of an elective C/S. Pelvic floor protection.** One of the strongest arguments advocating elective C/S is the long-term protection of the pelvic floor from prolapse, urinary and fecal incontinence. Rortveit et al<sup>9</sup> in a Norwegian study studying 15000 women have proven that urinary incontinence is more common in women who have had a vaginal delivery than those who had a cesarean. The prevalence of urinary incontinence in nulliparous women was 10%, 16% in women with C/S and 21% in those having vaginal delivery. The severity was worst in those with vaginal deliveries. For an individual woman, the risk of moderate to severe urinary incontinence would fall from 10% to 5% by having all deliveries by C/S. This means that it would take 33 C/S to prevent one case of moderate to severe urinary incontinence. The figures also show that even not having any children a significant number of women cannot avoid urinary incontinence. Nor does C/S prevent anal incontinence.<sup>10</sup> It must also be noted that these figures are related to urinary incontinence prior to the menopause. Incontinence which is more common after the fifth decade is not related to the mode of delivery but to smoking, obesity and tea drinking.<sup>11</sup>

**Avoidance of an emergency C/S.** Women are already exercising this right by refusing a trial of scar despite a good success rate. This may be the right track to follow as it has been clearly proven that an emergency C/S is associated with a substantial rate of morbidity and mortality.<sup>12</sup> The maternal mortality was found to be 5.9 for elective cesarean delivery versus 18.2 for emergency cesarean versus 2.1 for vaginal birth, per 100,000 completed pregnancies in UK during 1994–1996.<sup>13</sup> By having an elective C/S any woman can make sure she does not run the medical and psychological risks of an emergency C/S which are becoming more prominent.<sup>13</sup> Recent figures from UK and Israel suggest that an elective C/S is much safer than a vaginal delivery as maternal mortality is concerned.<sup>14,15</sup>

**Benefits to the baby.** Rates of birth injuries are reduced by more than 50% among neonates delivered by C/S.<sup>16</sup> However, these injuries among term infants of low risk women are extremely low even with vaginal delivery. More than 400 C/S would need to be performed to prevent a single case of permanent injury of the brachial plexus.<sup>17</sup> The risks of meconium aspiration, transmission of maternal infections may also theoretically be reduced by having elective C/S.

**The disadvantages of a policy of C/S on request. Maternal mortality and morbidity.** The other side of the coin tarnishes the view that vaginal delivery is a thing of the past. Maternal deaths still occur though rare as shown by the continuation of the maternal mortality reports worldwide where C/S is still a component. Data suggesting that C/S is many times more risky than vaginal delivery, which are very prominent.<sup>12,13</sup> However, the difference is not clearly made between risks in an emergency C/S and a planned one.<sup>18</sup> Data from UK suggest that a C/S is twice as risky as a vaginal delivery as regards to maternal mortality. In the time period from 1997 to 1999 the figure was 8 times that in the period from 1988 to 1990. Such information brings to mind where the state of the art is in different parts of the world. The risk of death from C/S will be much higher in areas with less facilities. But, we must keep in mind that the British figures include emergency C/S.<sup>19</sup> We also cannot ignore the long-term maternal risks of repeated C/S. Uterine rupture, placenta previa and pathological implantation of the placenta; abruption is higher in women who have had a previous C/S. The risk in a subsequent pregnancy after C/S of major bleeding was 5.2 per 1000 live births and placental abruption was 11.5 per 1000 live births.<sup>20</sup> The problem is even bigger in countries where high parity is the normal. These women will be at increased risk of placental previa and possible morbid adhesion of the placenta to the C/S scar which can result in cesarean hysterectomy and severe maternal morbidity and may be mortality.<sup>21</sup> All these are aside from the usual risks of abdominal surgery of hemorrhage, infection, damage to viscera and adhesion formation. Lacerations and bleeding may occur, at rates varying from 6% for elective cesarean to 15% for emergency cesarean.<sup>22</sup> Cesarean section also requires a longer recovery time. From a psychological perspective, postnatal depression is higher in women who have undergone a C/S delivery. This is not the case with a C/S on maternal request.<sup>23</sup>

**Risks to the baby.** Among term babies, the risk of neonatal respiratory distress necessitating oxygen therapy is higher if delivery is by cesarean (35.5 with a pre-labor cesarean versus 12.2 with a cesarean during labor versus 5.3 with vaginal delivery per 1000 live births).<sup>24</sup> Also, a recent study

has reported that the risk of unexplained stillbirth in a second pregnancy is somewhat increased if the first birth was by cesarean rather than by vaginal delivery (1.2 per 1000 versus 0.5 per 1000).<sup>25</sup>

In conclusion, with the increase in legalization of a physiological process, inherent problem with repeated operative deliveries that are not a problem in the west come to the forefront. In countries, where the average size of the family is in surplus of 5 children free access to C/S on maternal request would have huge implications both medical and economic. A cornerstone of medicine is to tailor the treatment to the patient keeping her best interests at heart. This may lead to a clear division in the way deliveries are managed between different parts of the world. Would it be a good idea or offer a free C/S on request policy worldwide and add to the high mortality and morbidity faced by women in countries with higher fecundity?

The National Institute of Clinical Excellence has commissioned the NCCWCH to develop national guidelines for C/S including a section on C/S request. The American College of Obstetricians and Gynecologists published a committee opinion that states "If taken in a vacuum, the principle of patient autonomy would lend support to the permissibility of elective cesarean delivery in a normal pregnancy, after adequate informed consent. To ensure that the patient's consent is, informed the physician should explore the patient's concerns. If the physician believes that cesarean delivery promotes the overall health and welfare of the woman and her fetus more than vaginal birth, he or she is ethically justified in performing a cesarean delivery. Similarly, if the physician believes that performing a cesarean delivery would be detrimental to the overall health and welfare of the woman and her fetus, he or she is ethically obliged to refrain from performing the surgery."<sup>26</sup>

Generally, an uncomplicated pregnancy and well managed labor carries few risks to mother and fetus. So, does an uncomplicated pregnancy with elective C/S. With serious morbidity both ways other factors come into play such as costs, care of the family with longer recovery time and the expected family size. It is believed that with the lack of evidence tilting the balance to either direction it is safe to council the woman and be comfortable whatever her choice. However, as a practitioner in the Middle East, where women wish to have more than 5 children, I do not feel that I can similarly counsel patients. Qatari women as shown, in the Qatar Family health survey (produced by the council of health ministers of GCC states)1998, to wish to have 5-7 children as an ideal number. Western evidence largely does not deal with long-term complications associated with 4 or more

C/S. In the near future those advising women on the options for delivery will need to ensure that the risks of a vaginal delivery are explained as well as those for a planned C/S. However, futuristic it may seem, we are fast approaching the time when begetting children does not require going through labor.

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