CORRESPONDENCE

Indications for and Risks of Elective Cesarean Section

by Prof. Dr. med. Dr. h.c. Ioannis Mylonas and Prof. Dr. med. Klaus Friese in issue 29–30/2015

Where Are the Advantages Mentioned?

Unfortunately, despite being mentioned in the title, the advantages of cesarean section are not adequately discussed in the article (1). The authors only cite a ten-year-old study, demonstrating a protective effect of cesarean section on urinary incontinence, even though many convincing and, above all, more recent studies are available indicating a protective effect (2). This also applies to the problem of pelvic organ prolapse (3). Also surprising is the unequal distribution of the studies mentioned: The authors list 12 studies on breastfeeding and cesarean section alone, but only a fraction of that number on pelvic floor injuries. This is despite the fact that pelvic floor injuries, in particular, are among the main reasons for litigation after childbirth; consequently, an increasing number of obstetricians calls for an approach to measuring the quality of obstetric care that is based on the extent of pelvic floor injury.

It is also beyond comprehension why only one study—the rightly controversial Term Breech Trial on breech presentation at term—is cited by the authors to address the criterion of maternal morbidity. At the same time, the most recent study on the topic with superior methodology which provides evidence of the advantages of elective cesarean section for breech deliveries is not mentioned at all (4). Besides, it is completely arbitrary to compare maternal morbidity associated with cesarean section and vaginal delivery only in such a specific patient group.

In the meantime, numerous sibling studies have invalidated the frequently heard argument against cesarean section that it increases the risk of chronic diseases, including type 1 diabetes, bronchial asthma and autism. Here, the authors only concede that there is inconclusive evidence on this topic, but do not mention the counter-evidence in favor of cesarean section. These examples show that this non-systematic review omits arguments in support of cesarean section and makes its benefits appear less significant than they actually are, based on the available evidence from studies. This creates a bias against cesarian section.

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Dr. Lenzen-Schulte receives royalties on her book “Königsweg Kaiserschnitt“ and has her own blog “Mein-Wunsch-Kaiserschnitt“.

Need for Innovations

Among the greatest challenges in obstetrics today are the high cesarean section rates. For a number of years, the AKF Working Group on Women’s Health in Medicine, Psychotherapy, and Society has raised awareness on this issue (www.kaiserschnittkampagne.de). Its commitment to promoting women’s health on a political level across disciplines has significantly contributed to getting an S3 guideline on indications for cesarean section underway. Apart from high-quality guidelines capable of improving the quality of the practical work in the delivery rooms, it is essential to address the structural, organizational and economic conditions which have contributed to the decline in normal births.

The following innovations would contribute to the development of modern, safe, women- and family-centered obstetrics:

- Early and routine integration of midwives in prenatal care could lessen the focus on risk and technology which dominates today’s obstetric care;
- Nationwide implementation of one-on-one care in delivery rooms is a prerequisite for a relationship-centered and progressive culture of giving birth;
- Making the topic of physiology of birth an integral part of the medical training curriculum would promote a deeper understanding of the normal process of giving birth;
- Establishing regular, joint reflection rounds of the delivery room staff as well as planned basic and advanced training events addressing special obstetric situations would enhance the ability of doctors and midwifes to handle special and emergency situations; and
- the removal of the wrong financial incentives existing under the DRG system, which discourage natural birth, would alleviate economic pressure.

Maternal request for cesarean section in the absence of medical indications, mainly driven by fear of giving birth (1), represents a particular challenge. It is known that many pregnant women change their mind after

in-depth advice and retrospectively rate their decision to have a normal birth as good (2). This highlights the high importance of comprehensive advice and a trustful relationship. Obstetric care in Germany could be advanced a step further by developing, applying and evaluating structured and quality-assured consulting concepts.

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Legal Situation

Mylonas and Friese arrive at the conclusion that cesarean section cannot be considered an equal alternative to spontaneous childbirth (1) and should be viewed with caution and only be performed when "clear advantages" are to be gained.

Doctors who follow this advice may be in for a nasty surprise in a lawsuit if a child is injured during a spontaneous vaginal delivery supervised by them (typically severe brain damage due to lack of oxygen).

The German Federal Court of Justice (Bundesgerichtshof, BGH) regards cesarean section as a treatment alternative to vaginal delivery (a view up to now backed by general approval of the medical profession) provided that the child is exposed to significant risk in case of performance or continuation of vaginal delivery and cesarean section is a medically acceptable alternative treatment, taking into consideration the mother's constitution and current state of health (BGH VersR 2011, 1146). If this is the case, the woman about to give birth must be informed about this treatment alternative. She even has the right to make the final decision, i.e. the mother has the final say when balancing the risks associated with each of the two treatment options (BGH VersR 1993, 835, 836).

Thus, the point is not whether cesarean section offers "clear advantages" over vaginal delivery. Such a differentiation criterion is not suitable for clinical practice as from an ex ante point of view all that can be done is to compare risks; however, the evaluation of risk is always subjective in nature.

In addition, it is striking that in their list of relative indications for cesarean section the authors completely ignored two indications playing an important role in clinical practice (breech presentation, fetal macrosomia) (2, 3).

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Substantial Advantages for Older Primiparae

The recent review in *Deutsches Ärzteblatt International* by Mylonas and Friese is strongly influenced by guidelines from English-speaking countries (1).

German obstetricians are often not aware of the extent to which colleagues in the UK find their professional autonomy curtailed. With the surging influence of midwives, obstetric guidelines have less and less to do with medicine. In 2003, a cesarean section guideline was passed by a committee of 16 members, of which only two were obstetricians—and both of them voted against the final version of that guideline (2). In my place of residence, New South Wales, Australia, a governmental guideline issued in 2010 was largely compiled by a professor of midwifery. To those who would like to ascertain the consequences of such practices I recommend the "Morecambe Bay Report"(3).

I can only call on my German colleagues to ignore such dubious political "guidelines". Elective cesarean section offers substantial advantages for older primiparae. The risk of stillbirth alone is reason enough—not to mention the high probability of pelvic floor injury (4). Recently, we have demonstrated that in Sydney only about one quarter of primiparae at term can expect a normal vaginal delivery without permanent damage to the anal sphincter or levator ani.

Obstetricians and midwives need to treat their patients as adults. Dismissing the wishes of (often well-informed) women asking for an elective cesarean section ignores both recent scientific evidence and the ethical and legal principle of patient autonomy.

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An Act of Unpredictability

The authors are to be thanked for their effort to describe and analyze this dramatic paradigm change in obstetrics. And their conclusion is encouraging: Cesarean section is an escape hatch, not an equivalent alternative to spontaneous vaginal delivery (1). The article highlights yet another perspective: It appears that we have succeeded within a few years to reflect the merits and dangers of cesarean section. But we have not succeeded in understanding childbirth at all. Here, it is high time to develop a theory of science, as the lesson to be learned from the history of obstetrics is to be humble. Many developments (forceps delivery, routine episiotomy, cerclage, etc.) have been put back into perspective or even abolished over the years.

I think that the increasing popularity of cesarean section is mainly due to changes in how society views childbirth and the related significant increase in fear and anxiety among both obstetricians and expectant families. In times dominated by control and perfection, an act of unpredictability and devotion, such as childbirth, has hardly any chance to survive. What is needed is "contemplation" and "de-frightening" right from the start; and a corresponding health aim and new guidelines should be defined. In Germany, about 50% of all cesarean sections are planned procedures (2). I think that this is solely due to organizational and economic reasons; there is no medical rationale for it. Birth without advance warning is an event not provided for. Therefore, my team and I are happy to get up at night whenever the self-determined date and hour of birth should be. I firmly believe that this approach makes sense.

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In Reply:

We are pleased that our article (1) has initiated a critical discussion of this difficult topic. Our review article attempts, as noted by Dr Lütje, to analyze the paradigm change in the acceptance of cesarean section. Unfortunately, given the scope of this topic, it is not possible to address all aspects in a comprehensive and detailed manner.

The aspect of the protective effect of cesarean section regarding urinary incontinence and genital prolapse has been raised by Dr Lenzen-Schulte and Dr Dietz. For a number of years, there has been great controversy about this subject. Dr Lenzen-Schulte mentions two studies, which were available only after the publication of our review article. In the meantime, several additional studies evaluating the prophylactic effect of cesarean section on the development of urinary incontinence have been published, albeit with conflicting results (2–4). However, it remains to be seen if these studies will result in a substantial reconsideration of the preventative role of cesarean section, leading to new recommendations. Until then, a cesarean section on request is not recommended (5); however, the individual decision regarding therapeutic options remains unaffected.

As stated by Dr Uphoff, when it comes to assessing the potential risks, the decision ultimately lies with the expectant mother. Consequently, Dr Dietz's concerns that obstetricians' or midwifes' disrespect for women's legitimate wish for a cesarean section could lead to paternalism appear as largely unfounded in respect of the legal situation in Germany.

Unlike in English-speaking countries, where ethical and economic issues as well as the concept of autonomy and loss of control are of far greater importance, the validity of the respective medical indications and the distinction between absolute and relative indications are at the center of the discussion in Germany. However, for obstetricians practicing in Germany, it is difficult to evaluate the political, socioeconomic and cultural background influencing the development of guidelines and the daily clinical practice in these countries, as highlighted by Dr Dietz. For example: In the case report of a patient wishing for a primary cesarean section after she had experienced three miscarriages, including a life-threatening complication along with placental abruption, a committee consisting of an obstetrician, a neonatologist, an ethics expert and a coordinator of the perinatal center was formed to discuss with this patient her request for a cesarean section (6). In the light of today's limited personal and financial resources in Germany, this approach might be considered inexplicable.

As Dr Uphoff mentions, the German Federal Court of Justice (BGH) regards cesarean section as a treatment alternative to vaginal delivery "provided that the child is exposed to significant risk in case of performance or continuation of vaginal delivery and cesarean section is a medically acceptable alternative treatment, taking into consideration the mother's

constitution and current state of health". There is no question that in cases of maternal or fetal emergency (i.e. hypoxia during childbirth) it is medically required to end the parturition as soon as possible, including by means of a cesarean section, to avoid any adverse outcome for the baby. It is coherent that the "clear advantages" of cesarean section in such situations refer to the prevention of these damages. With regard to an elective/planned cesarean section (i.e., request of the mother to prevent pelvic floor injuries or initiated by maternal anxiety), the primary objective is to take the risks, advantages and disadvantages into consideration and discuss them with the patient. Ultimately, from a legal perspective, the final decision is with the expectant mother.

It is very likely that the undisputed increase of cesarean section rates is due to the increasing tendency toward risk avoidance or risk minimization of the expectant parents, risk-adapted obstetrics in respect of increasing legal and liability-related issues, changes in the training of obstetricians as well as socioeconomic and cultural changes. Some of the comments of Mrs Striebich and Dr Lütje, such as the development of guidelines or the establishment of regular cooperative basic and advanced training sessions for midwives and doctors, have become an essential part of obstetrical training in numerous hospitals, improving the medical care we provide to our pregnant patients.

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