Table B, Supplemental Digital Content. Additional content from included titles

This table contains findings, results, and conclusions from non-clinical studies (non-systematic reviews, letters, debate posts) and studies that are not stating mode of anesthesia (and are therefore not included in tables 4 and 5 on primary and secondary outcomes).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Author, year, country** | **Type** | **Design** | **Regional or general anesthesia** | **No of participants** | **Partner present?** | **Time to follow-up** | **Results and conclusion** |
| Leach  1984  Canada | Journal article | Review, not systematic | Both | NA | No | NA | “The primary obstacle to a family-centered caesarean birth are the health-care professionals who persists in viewing a caesarean birth as first, and only, surgery”.  “A woman who has delivered a child under general anesthesia cannot experience the birth, determine the health or sex of the infant, or welcome it into the world. […] she may also harbor doubts as to the ownership of the infant”  “The father is still routinely excluded from caesarean birth. His exclusion has been justified with concerns that he might faint, contaminate the sterile field, or violate another patient’s privacy. These fears have, for the most part, been unfounded”.  “The relationship [between father and child] is greatly enhanced if it is begun immediately after birth”.  “It is important that the father witnesses the birth – experiencing it as only a parent can. The mother who is unconscious during the birth depends upon the father to describe the birth from a parents’ perspective”. |
| Freeman  1989  UK | Letter, description of a case | NA | General | One couple having emergency CS | Parents insisted that the father was present throughout. CS uneventful. | NA | Large debate among anesthesiologists following the CS. Medical Defense Union was contacted, they state: “An anesthesiologist would be expected to do the best they could for mother and baby”. A policy is being formed. Asking for inputs from others. |
| Russell  1989  UK | Letter, response to Freeman 1989 | NA | Spinal converted to general anesthesia | One couple | Father was asked, wanted to remain in the OR. | NA | “I [the anesthesiologist] found the induction of general anesthetic stressful”  “I see no reason to deny the father the right to see his baby being born, even if the mother does not want to be awake”  “We expect our obstetricians to perform under the gaze of a partner’s sometimes quite professional eyes […] What we expect of our colleagues we too should be prepared to undertake” |
| Gadelrab  1989  UK | Letter, response to Freeman 1989 | NA | Not stated | One couple | Father forced his way into the OR. | NA | “[the father] was threatening and abusive and refused to leave”  “The staff completed the operation without mishap in an atmosphere of increasing menace and threat of assault”  “[…] a husband must only enter theatre at the discretion of the staff”  A hospital policy has been formulated and is handed out to all obstetric patients. |
| Bogod  1990  UK | Letter, opinion | NA | General | NA | NA | NA | “Mothers who have operative delivery under general anaesthesia sometimes believe that the baby presented to them afterwards is not really theirs. […]This can be alleviated by the husband, if present, acting as a ‘family witness’ of the birth. If this is indeed the case, the presence of the husband may benefit both patients”  “having the husband come in after the proceeding are underway, to witness the birth; then he will be shepherded out with the baby” |
| Paravicini  1996  Deutschland  [german] | Debate | NA | Regional and general | NA | Argues against having a partner present | NA | A caesarean section is a pathological process, as opposed to the natural birth.  The success of the procedure depends on all involved being fully focused on handling the medical emergency, not the father. Only what is absolutely necessary should be done, everything else are distractions.  It is neither the anesthesiologist’s nor the obstetricians’ duty to perform “family care” in the OR, they are only there to perform the caesarean section at the highest standard.  Having the father in the OR could turn into a legal right, so he would also demand (and call for an attorney) to be present the next time, and the ‘movement’ to allow lay people in the OR will spread to other specialties.  Who should take care of the father if he faints? Who is responsible? He risks contaminating the sterile area or otherwise harm his wife.  The professionals will feel watched and disturbed.  To tolerate the smell in an OR or breathe when wearing a facemask is difficult for the father. |
| German society for Anesthesiology and Intensive Care Medicine  1999  Deutschland  [German] | Statement from a medical society | NA | Regional and general | NA | NA | NA | Generally, lay people are not allowed to witness medical procedures, unless there is a medical reason and the patient consents.  The responsible doctor can allow a relative to be present but is not obliged to do so.  In elective CS, most often in regional anesthesia, a partner will often be allowed. In emergency CS under general anesthesia a partner will not be allowed in.  If the mother wishes for her partner to be present during CS, and the partner consents, he should fill out a consent form beforehand [an example is described in the document].  The partner shall consent to leave:  -leave the OR if asked to.  -refrain from legal complaints if they themselves get hurt in the OR (for example from fainting) |
| Robinson  2004  UK | Debate, pro | NA | General | NA | Opinion; for having partners present | NA | “anaesthetists should take a lead in this matter and offer couples the choice of whether the partner stays or leaves the theatre for the delivery of his child”  “The one consistent feature described by mothers in labour and at delivery is the presence of a support person”  “I feel that this [asking the partner to leave] is mainly because of the medico-legal consequences if matters go wrong.”  “Presence of parents/partners is a well-established practice within pediatric anesthesia and relatives are often also allowed to witness resuscitation efforts on adults”.  “One of the biggest difficulties of performing caesarean section under general anaesthesia is the anxiety of the mother. […] My view is that a partner can support and calm the mother”  “most intubations are straightforward and anaesthetists perform regional anaesthesia in many emergency situations with many theatre personnel including partners watching them”  “a member of the theatre staff will have to be present to explain and support the partner during induction of anaesthesia”  “it is not for the anaesthetist to make this decision but for the couple to decide irrespective of the gravity of the situation.” |
| Smiley  2004  USA | Debate, con | NA | General | NA | Opinion; against having partners present | NA | “There have been no studies examining whether the presence of the father or anyone else as a support person during caesarean section has any effect on maternal satisfaction or outcome”  “In the absence of the conscious mother [under general anesthesia], the best reason for the presence of the partner disappears”  “there is no way for the family to share the moment when the mother is not present”  “It is similarly rather silly to try to pretend that one can treat a surgical procedure under general anesthesia as if it were a normal, “natural” birth”  “Preventing the partner from being present at the caesarean birth may do more to make the entire birth experience more tolerable and the parents’ memory of the events (eventually) more consistent with the birth process they had hoped for”  “some and perhaps many women would choose not to have their partners see them intubated and paralyzed under general anesthesia. A policy that assumes that it is appropriate for partners to be present places undue pressure on the mother to acquiesce”  “one risks the possibility that he will witness a failed intubation, the subsequent struggle with ventilation or other modes of support, and potentially worse. Even if the outcome is not an injured mother or neonate, the emotional trauma to the partner can be significant”  “[There can be legal issues] someone who witnesses an injury to a loved one can sue for and collect damages for the emotional trauma of being present when the event happened”  “the very real possibility that the anesthesiology-surgical team will perform less well under the observation of the woman’s partner”  “with no one to talk to [for the father] other than the anesthesiologist, he may reduce the anesthesiologist’s vigilance towards the mother”  “Those men who do insist [on being present] tend to be more aggressive and controlling, and would pose a more than average risk of interference with the safe conduct of the anesthetic and surgery”  “The possibility of injury to the partner himself should not be overlooked. There have been many reports of partners fainting”  ”If we routinely allow partners in for general anesthesia, […] we may well end up performing more general anesthetics for caesarean sections” |
| Lindberg  2013  Sweden | Journal article | Qualitative | Not stated | Eight fathers having experienced their partners’ complicated childbirth that involved a postoperative stay at an ICU | Some present, some not (numbers not stated) | 1,5 to 3 months after CS | Main finding: “Fathers struggled to be recognized by the care staff as partners in their families.”  Fathers not present during CS:  “Expressions of fear, frustration, and helplessness related to not being able to do anything for the mother and the prospective child”  “Fear of seeing his wife for the last time”  “Fathers described the term ‘‘catastrophic caesarean section,’’ which staff used in the delivery room to alert the surgical and anaesthetic staff, as very dramatic.”  “Feeling abandoned […] when their partners were taken away to undergo an emergency or catastrophic caesarean section”  “Experiencing being uncared for upon being excluded and separated from their partner”.  “Experiencing less stress when they knew that their partners were in good hands and being treated well by staff”.  “Described waiting on operation results as a very trying, apprehensive period that made them lose track of time.”  Fathers present during CS:  “Although fathers reported experiencing the operating room as an uncomfortable, scary environment, fathers who were present during preparation and the operation expressed appreciation for not being excluded.”  “Wanting the staff in the operating room to recognize them both as an active participant and as the father during the emergency situation”.  “Being treated well by staff and appreciated the continuous communication during the operation”  “Being present during the caesarean section was described to include family togetherness, during which time fathers could continue in their roles as partners’ caregivers and supporters”  “not asking to be informed because they preferred that staff focus on the mother and child” |
| Brüggemann  2015  Brasil | Journal article | Qualitative | Regional and general | Healthcare professionals, 12 nurses and five technical directors from 12 institutions | No | NA | Five themes emerged:  “-The operating room is not the place for a companion;  -In the delivery room companions are not allowed to come in;  -The companion does not have emotional and psychological preparation;  -Lack of participation in prenatal care hinders the entrance of the companion;  -If the companion does not ask, he does not come in, but if he requires [really demanding], he may come in [we have no way to say no].” |
| Kondou  2018  Japan | Journal article | Qualitative | Not stated | Nine fathers present at hospital during their wives first childbirth | No | One to six days after CS | “The husbands thought that the doctors performed well during surgery and trusted the doctors”  Before the CS: “The husbands offered relief by holding hands with their wives to ease the fear of caesarean section”, “15-20% reported fear of the death of their wife”.  During the CS: “anxiety while waiting for prolonged periods”, “time moving too slowly”, “anxiety about wife’s safety”, “hope for safety”, “waiting with relatives helped to relieve and comfort the husbands”, “having hope for my baby”.  After the CS: “pleasure in meeting the baby”, “sense of relief and pleasure”, “determination to become a father”, “sense of relief upon returning to the hospital room [with wife]”, “caesarean section was a good choice”, “gratitude to my wife”, “remaining anxious and fearful”. |
| Pereda-Goikoetxea  2019  Spain | Journal article | Qualitative | Regional | 43 mothers, 5 had emergency CS (not possible to extract data specifically on CS-mothers); 33 for second interviews | No | Eight weeks and eight months after CS | “The women considered the presence of their partners during childbirth the most important form of support”  “I wish the father could have been in the operating room.” |
| Maziero  2020  Brazil | Journal article | Qualitative | Not stated | 29 health professionals, providing direct assistance to women in labor, normal or caesarean delivery; 11 nurses, 9 doctors and 9 nursing technicians | Investigates healthcare professionals’ reasons for not having the partner present | NA | “The companion interferes during the professionals’ procedures, besides not being able to understand what is happening.”  “The environment is not adequate [during caesarean section]”  “Not enough physical space to have a companion at all times. The companion goes to the corner of the room. That’s not interesting if the place has no structure of its own, because it often takes the place of the anesthetist.”  “In high-risk pregnancies the presence of the companion should not be allowed”  “The hospital environment is a place where it is not routine to have a companion. In urgency or emergency, it is completely contraindicated.”  “In caesarean section the decision of the companion [‘s presence in the OR] is the responsibility of the surgical team”  “In caesarean section I think it’s not good. It is not good for the team, the patient or the companion, who is nervous about the high-risk surgery; sometimes the baby is born prematurely or badly born, it is complicated, it is not good to enter the operating room”  Conclusion: “The presence of the companion during labor and delivery is a booster for the adoption of other good practices, favoring the reduction of interventions during the birth, so it is essential that the maternities adapt and really establish the guarantee of the companion’s right for all women [including complicated births and caesarean sections] |

CS: caesarean section, in this table only used in the meaning “emergency caesarean section”, as studies concerning elective caesarean sections were not included. CSGA: caesarean section in general anesthesia. CSRA: caesarean section in regional anesthesia (epidural or spinal). OR: operation room.