NICE National Institute for Health and Care Excellence

Caesarean birth (NG192) – Update to recommendations on surgical opening technique

This guideline covers when to offer and discuss caesarean birth, procedural aspects of the operation, and care after caesarean birth. It aims to improve the consistency and quality of care for women and pregnant people who are thinking about having a caesarean birth or have had a caesarean birth in the past and are now pregnant again.

These recommendations will update NICE guideline NG192 (published March 2021).

Who is it for?

- Healthcare professionals
- Commissioners
- Pregnant women and pregnant people, their families and carers

What does it include?

- revised recommendations on surgical opening technique
- rationale and impact information that explains why the committee made the 2023 recommendations and updates, and how they might affect practice and services.

Information about how the guideline was developed is on the guideline's webpage. This includes the evidence review, details of the committee and any declarations of interest.

Updated recommendations

We have reviewed the evidence on surgical opening technique. You are invited to comment on the revised recommendations only. These are marked as **[2004, amended 2023]**, or no change.

ID Number (please use to identify what comment relates to at consultation)	Existing recommendation in NG192	Proposed revised recommendation	Rationale for change	Impact of change
1	**Abdominal wall incision** 1.4.28 Perform caesarean birth using a transverse abdominal incision to: • make postoperative pain less likely • give an improved cosmetic effect	This recommendation has been deleted.	The committee agreed that midline incisions were no longer routinely used for caesarean birth and so it was not necessary to make a recommendation, advising that a transverse incision should be used instead.	As midline incisions are no longer used deleting this recommendation will not impact on current clinical practice. There will be no resource impact from this change.

	compared with a midline incision. **[2004]**			
2	1.4.29 Perform caesarean birth using a transverse incision (a straight skin incision, 3 cm above the symphysis pubis; subsequent tissue layers are opened bluntly and, if necessary, extended with scissors and not a knife). This allows for shorter operating times and reduces postoperative febrile morbidity. **[2004]**	1.4.29 Perform caesarean birth using a low, transverse, straight skin incision with subsequent tissue layers opened bluntly and, if necessary, extended using sharp dissection. This may need to be modified with a higher incision for women and pregnant people with class 3 obesity (BMI 40 kg/m^2 or more). **[2004, amended 2023]**	There was evidence that a low transverse straight skin incision with blunt dissection of subsequent tissue layers (such as described in the Joel-Cohen or modified Joel-Cohen techniques) led to a reduction in post-operative febrile morbidity and use of post-operative analgesia, reduced decreases in haemoglobin and reduced total operating time compared to the use of a very low transverse curved skin incision and sharp dissection (as described in the Pfannanstiel technique). The committee agreed that in some women and pregnant people, such as those who have had previous caesarean births, the presence of scar tissue may mean that blunt dissection was not always possible and so in some cases, which would be decided by the surgeon at the time of operation, sharp dissection would be necessary for extension.	The method of skin incision and opening of subsequent layers will be standardised across the NHS, while allowing room for surgeon modification on a case-by-case basis, for example in women and pregnant people who are obese or have had previous caesarean births. Use of a technique which reduces operating time, blood loss, pain and infections may lead to savings in resource use to treat these complications.

			There was evidence that in women and pregnant people with class 3 obesity (BMI of 40 kg/m^2 or more) there was an increased risk of wound complications with the Pfannanstiel technique (which uses a very low incision) compared to a higher transverse abdominal incision. The committee discussed the fact that in very obese women and pregnant people the presence of a panniculus led to the wound being covered which increased the risk of infection. Based on this evidence, and their knowledge of the complications caused by a panniculus, the committee therefore recommended that in these situations a higher incision may be needed. The committee agreed not to use the names of the surgical techniques in the recommendations as the number of techniques, including the modified techniques, and the slight variations between them may lead to confusion. They	

			therefore agreed that it was preferable to describe the details of the incision and subsequent opening.	
3	**Instruments for skin incision** 1.4.30 Do not use separate surgical knives to incise the skin and the deeper tissues in caesarean birth, as it does not decrease wound infection**. [2004]**	This recommendation has been deleted.	The committee agreed that separate knives were no longer routinely used for skin incision and deeper layers so it was not necessary to make a 'do not use' recommendation advising this.	As separate knives are no longer used deleting this recommendation will not impact on current clinical practice and will have no resource impact.
4	**Extension of the uterine incision** 1.4.31 When there is a well formed lower uterine segment, use blunt rather than sharp extension of the uterine incision to reduce blood loss, incidences of postpartum haemorrhage and the need for transfusion during caesarean birth. **[2004]**	1.4.31 When there is a well-formed lower uterine segment, use blunt rather than sharp extension of the uterine incision to reduce blood loss, incidences of postpartum haemorrhage and the need for transfusion during caesarean birth. **[2004]**	No changes made.	No changes made.