NICE National Institute for Health and Care Excellence

Caesarean birth (NG192) – Update to recommendations on placenta accreta spectrum

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?

- new and revised recommendations on placenta accreta spectrum
- rationale and impact information that explains why the committee made the 2023 recommendations and updates, and how they might affect practice and services. Full details of the evidence and the committee's discussion are included in evidence review H: placenta accreta spectrum

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 placenta accreta spectrum. You are invited to comment on the new and revised recommendations only. These are marked as **[2023]** or **[2011, amended 2023].**

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	**Placenta accreta spectrum** 1.2.7 For women who have had a previous caesarean birth, offer colour-flow Doppler ultrasound at 32 to 34 weeks as the first diagnostic test for placenta accreta spectrum (PAS) if low-lying placenta is	**Placenta accreta spectrum** 1.2.7 If the routine 20-week ultrasound scan shows placenta praevia or low-lying placenta in a woman or pregnant person with a previous caesarean scar (or a uterine scar from other surgery), refer for a greyscale ultrasound scan with colour	The routine 20-week ultrasound scan offered to women and pregnant people is used to determine placental location so the committee agreed that identification of a placenta praevia or low-lying placenta at this scan in those with a previous caesarean scar, or a scar from previous uterine	The 20-week ultrasound scan is routinely offered to all women and pregnant people already so this will not be a change in practice. The use of a 28-week ultrasound scan with colour Doppler to diagnose

	confirmed. **[2011, amended 2021]**	Doppler, to be performed by a consultant obstetrician specialising in fetal medicine by 28 weeks to assess for placenta accreta. **[2023]** (See the NICE guideline on antenatal care for more information on routine scans.) 1.2.8 If placenta accreta is diagnosed or cannot be ruled out by the greyscale ultrasound scan with colour Doppler (see recommendation 1.2.7), refer the woman or pregnant person to a specialist regional placenta accreta centre for confirmation of the diagnosis. **[2023]** 1.2.9 Care and ongoing management for women or pregnant people with a diagnosis of placenta accreta spectrum should be provided by a specialist regional placenta accreta centre (also called abnormally invasive	surgery, should trigger the need for further investigations to check for the presence of placenta accreta. There was evidence from a number of studies that grey scale ultrasound with colour Doppler had moderate sensitivity and high specificity for detecting placenta accreta. The committee were aware that the sensitivity and specificity of ultrasound scans is very operator-dependent and that it is very important not to miss a case of placenta accreta because of the risk of severe morbidity or mortality at birth. The committee therefore recommended that the scan should be conducted by aconsultant obstetrician specialising in fetal medicine who would have the necessary expertise and experience. The committee discussed the timing of this scan and noted that most of the included studies carried out the scan between 28 and 37 weeks. The committee agreed that an earlier scan would allow more	placenta accreta is not a change in practice, and although the timing is now earlier than previously recommended this will not lead to additional scans. Advising that the scan is conducted by a consultant obstetrician specialising in fetal medicine is a change to the recommendations but in practice the scan is already conducted by a consultant in the majority of cases so this will not be a major change in practice. Furthermore, using a more experienced operator for a condition as serious as placenta accreta is likely to lead to the best sensitivity and specificity from the test. This in turnis likely to reduce the risk of serious morbidity or mortality for the mother

		placenta or AIP centre). **[2023]**	time for planning the birth, particularly if an early birth was thought to be necessary, and so recommended that the scan be conducted by 28 weeks. The committee discussed that since 2020 NHS England has commissioned a specialised maternity service for women and pregnant people diagnosed with placenta accreta spectrum (which they refer to as abnormally invasive placenta, or AIP) that enables diagnosis and care, including the birth, to be delivered in a centre with the appropriate multidisciplinary team, access to adult intensive care, level three neonatal care and access to blood products. The committee therefore recommended that, if placenta accreta is diagnosed or cannot be ruled out at the 28-week scan, women and pregnant people should be referred to a specialist regional placenta accreta centre.	and baby, and optimise resource use by preventing complications at birth which can lead to costly intensive care admissions for both mother and baby, and also reduce the number of false positives where referral to a specialist centre is made, but the diagnosis of placenta accreta is later found to be incorrect. Specialist regional placenta accreta spectrum centres are already established so recommending appropriate referral to them will not have a resource impact.
2	1.2.8 If a colour-flow Doppler ultrasound scan result	**Care for women with placenta accreta spectrum in specialist centres**	The committee agreed that the moderate sensitivity and high specificity of an ultrasound	This recommendation may reduce the use of MRI for the diagnosis

	suggests placenta accreta spectrum: • discuss with the woman how MRI in addition to ultrasound can help diagnose placenta accreta spectrum and clarify the degree of invasion, particularly with a posterior placenta • explain what to expect during an MRI procedure • inform the woman that current experience suggests that MRI is safe, but that there is a lack of evidence about any long-term risks to the baby. Offer MRI if this is acceptable to the woman. **[2011, amended 2021]**	1.2.10 Consider an MRI scan to complement ultrasound findings when planning ongoing surgical management of placenta accreta spectrum. Discuss the following with the woman or pregnant person: • what to expect during an MRI procedure • that MRI can help clarify the degree of invasion, particularly with a posterior placenta • that current experience suggests that MRI is safe, but that there is a lack of evidence about any long-term risks to the baby. **[2023]**	scan with colour Doppler, especially when conducted by an obstetrician specialising in fetal medicine, would lead to a diagnosis of placenta accreta spectrum, and there was evidence showing that the sensitivity and specificity of MRI (without contrast or with contrast unspecified) for diagnosing placenta accreta spectrum was no better than that for ultrasound with colour Doppler. The committee therefore agreed that it was not necessary to offer an MRI scan to confirm the diagnosis of placenta accreta. However, the committee agreed that MRI was a useful imaging technique when planning surgical management of placenta accreta to identify if, for example, placenta percreta had impacted on other organs, and so amended this recommendation for MRI.	of placenta accreta and this may reduce costs.
3	1.2.9 Discuss birth options (for example, timing of birth, operative interventions including possibility of hysterectomy, need for	1.2.11 Discuss birth options (for example, timing of birth, operative interventions including possibility of hysterectomy, need for blood	Although the committee were aware that women and pregnant people with placenta accreta are now referred to specialist regional centres who	The option for the discussion about birth options to be carried out by a senior trainee, instead of always

	blood transfusion) with a woman suspected to have placenta accreta spectrum. This discussion should be carried out by a consultant obstetrician, or with a consultant obstetrician present. **[2011, amended 2021]**	transfusion) with a woman or pregnant person suspected to have placenta accreta spectrum. This discussion should be carried out by a senior obstetrician (such as a consultant or ST6 or above trainee).. **[2011, amended 2023]**	have high levels of expertise, they discussed that the guideline recommendations also provide information for women or pregnant people and that some people may present very late in pregnancy or in labour and need to be cared for at their local maternity unit, and so these recommendations were retained in the guideline. The committee agreed that the discussion on birth options could be carried out by a consultant or senior trainee (ST6 or above) and so amended the wording of the recommendation.	needing a consultant may lead to a small cost saving.
5	1.2.11 Before performing a caesarean birth for women suspected to have placenta accreta spectrum, the multidisciplinary team should agree which other healthcare professionals need to be consulted or present, and the responsibilities of each team member. **[2011, amended 2021]**	1.2.12 When planning a caesarean birth for women or pregnant people suspected to have placenta accreta spectrum, the multidisciplinary team should agree which other healthcare professionals need to be consulted or present (for example specialists in gynaecological surgery, interventional radiology, colorectal surgery, urology or vascular surgery depending	Although the committee were aware that women and pregnant people with placenta accreta are now referred to specialist regional centres who have high levels of expertise, they discussed that the guideline recommendations also provided information for women or pregnant people and that some may present very late in pregnancy or in labour and need to be cared for at their local maternity unit, and so	Wording clarification only. No resource impact of change.

		on the nature of the placenta accreta spectrum), and the responsibilities of each team member. **[2011, amended 2023]**	these recommendations were retained in the guideline. The committee clarified the other healthcare professionals who may need to be consulted or present.	
4	1.2.10 When performing a caesarean birth for a woman suspected to have placenta accreta spectrum, ensure that: • a consultant obstetrician and a consultant anaesthetist are present in the operating theatre • a paediatric registrar, consultant, or equivalent, is present • a haematology registrar, consultant, or equivalent, is available for advice • a critical care bed is available • sufficient cross-matched blood and blood products are readily available. **[2011, amended 2021]**	1.2.13 When performing a caesarean birth for a woman or pregnant person suspected to have placenta accreta spectrum, ensure that: • a consultant obstetrician and a consultant anaesthetist are present in the operating theatre • a paediatric registrar or consultant is present to provide immediate care for the baby as soon as it is born • a haematology registrar or consultant, is available to contact for advice • a critical care bed is available for the woman or pregnant person, and a critical care neonatal cot is available for the baby • sufficient cross-matched blood and blood products	Although the committee were aware that women and pregnant people with placenta accreta are now referred to specialist regional centres who have high levels of expertise, they discussed that the guideline recommendations also provide information for women or pregnant people and that some may present very late in pregnancy or in labour and need to be cared for at their local maternity unit, and so these recommendations were retained in the guideline. The committee clarified the role of the paediatrician at the birth, and that a critical care bed should be available for the woman or pregnant person, and for the baby in case they are needed.	Wording clarification only. No resource impact of change.

		are readily available (if blood transfusions are acceptable to the woman or pregnant person). See the NICE guideline on blood transfusion. **[2011, amended 2023]**	The committee amended the recommendation on use of blood products to clarify that this should only be if the use of such products is acceptable to the woman and included a link to the NICE guideline on blood transfusion as this provides some useful advice on alternatives to blood transfusions and also cell salvage and tranexamic acid.	
6	1.2.12 All hospitals should have a locally agreed protocol for managing placenta accreta spectrum that sets out how these elements of care should be provided. **[2011]**	1.2.14 Specialist regional placenta accreta centres and the local maternity units they support should develop protocols covering how placenta accreta spectrum should be diagnosed, assessed and managed across their network. The protocol should include the care and management of placenta accreta spectrum identified late in pregnancy or in labour, including how regional units can support emergency care in local maternity units. **[2023]**	The committee agreed that as placenta accreta was no longer managed by local hospitals a local protocol was no longer appropriate, but that specialist regional placenta accreta centres should develop protocols with their local maternity units about how placenta accreta should be managed within the network, such as methods for referral and ongoing management. The committee also agreed that the protocol should include details of how local maternity units should provide care if placenta accreta was identified very late, which may include, for example, emergency transfer to	This recommendation will ensure that all maternity centres, both local units and specialist regional centres for placenta accreta will understand their responsibilities, which will enable safe care to be provided in the correct place. Specialist regional placenta accreta spectrum centres are already established so recommending protocols for care pathways across the

			a specialist regional centre or support from the specialist regional centre being provided to the local maternity unit.	network will not have a resource impact.