Optimal Cord Clamping

This leaflet explains optimal (delayed) cord clamping, including the benefits, risks, any alternatives and what you can expect when you have your baby.
If you have any further questions, please speak to a doctor or midwife caring for you.

What is Optimal cord clamping?

Optimal (delayed) cord clamping is when there is a delay of one minute or more between the birth of your baby and when we clamp and cut the umbilical cord.
It used to be common practice to clamp and cut the umbilical cord immediately but if you and your baby are well, the cord should not be clamped earlier than one minute after birth.

The umbilical cord links your placenta to the baby, which continues to pulsate once baby is born. This is because it is still transferring blood, oxygen and stem cells to your baby while s/he adjusts to being outside the womb.

It is now normal practice to wait until the cord has stopped pulsating before clamping and cutting the cord. Normally the midwife can feel when this happens by touch.
If your baby needs additional support, the cord may need to be clamped and cut sooner. However, we may be able to use a specialist device that is brought to the bedside to help your baby and avoid clamping the cord too early in some situations.
It does not matter what management you have for the birth of your placenta, whether it is active or physiological. In both situations, we can still facilitate optimal cord clamping – please speak to your midwife or doctor about managing the birth of your placenta if you'd like to learn more.

Why should I have optimal cord clamping?

The benefits of optimal cord clamping include:

- Allows for a more stable transition to life outside of the womb by improving the changes in their circulation.
- Increased iron levels in the baby even up until they are six months old - this helps with growth and both physical and neurological development.
- Increased amount of stem cells - this helps with your baby's growth and their immune system.

If your baby is born prematurely (before 37 weeks), delayed cord clamping over one minute can have life-saving benefits.

The benefits of optimal cord clamping in babies born prematurely include:

- Reduces the chance of your baby needing a blood transfusion because of the increase in iron levels.
- Reduces the risk of serious gut inflammation.
- Reduces the risk of life-threatening infections.
- Reduces the risk of bleeding on the brain.
- Supports your baby to receive oxygenated blood from the placenta if they are unable to breathe on their own.

To facilitate optimal cord clamping in preterm babies, we aim to use bedside equipment called a bedside (LifeStart) Resuscitaire. With this we can support your baby if it has been a difficult birth and they need extra support or they are too small to breathe independently. Please see the information and images at the end of this leaflet to understand more about a bedside Resuscitaire.

What are the risks of optimal cord clamping?

There is a small increased risk of jaundice in babies who have received optimal cord clamping. This is usually mild and resolves on its own but sometimes requires specialist care.

Jaundice is very common in newborn babies and it may happen no matter how soon the cord is clamped after birth. Your baby will be examined for signs of jaundice within 72 hours of being born as part of their newborn physical examination.

Are there any alternatives / reasons not to have optimal cord clamping?

The alternative would be for the cord to be clamped and cut before one minute. There are some rare circumstances where delayed cord clamping is not advised, e.g., if there is an issue with the placenta that can make it more likely for you to bleed heavily, if there is heavy bleeding from another cause, if the cord is damaged or snapped or if you have twins / triplets who share a placenta (monochorionic). This would be discussed with you before the birth if any of these factors affect you.

How can I prepare for optimal cord clamping?

Our ambition is that optimal cord clamping is our standard of care and the team would be very happy to discuss this with you during your pregnancy or labour. You may want to discuss whether your birth partner would like to cut the cord if it is safe to do so – however this may not be possible if the baby needs urgent support with their breathing or the birth is in theatre.

The team looking after you during your labour / birth will find it helpful if you write down your birth preferences during pregnancy either using the Birth Preference Infographic that you can access using a QR code on page 14 of your handheld antenatal notes or from the 'Parent Education Resources' page of the St George's

Maternity website. You will also be encouraged to ask any questions you would like during your care to ensure you are providing your informed consent.

Will my baby or I feel any pain?

No, there are no nerves in the cord, so neither you nor baby will feel any pain or discomfort when the cord is clamped or cut.

What happens after the cord is clamped and cut?

If there are no concerns with you or baby, we encourage skin to skin immediately at birth – this may be while the cord is still attached (if the birth is not in theatre) and it would be clamped while maintaining this position. If the baby needs support from our team of neonatal doctors and nurses, after the delay of one minute, the cord will be clamped and cut, then baby will be assessed for their need to have further assistance. This means your baby might be taken to the Resuscitaire where they will be assessed for their breathing and heart rate. If babies are struggling to transition on their own, they may be given breathing support by the neonatal team.

When a baby is born prematurely, or admitted to the neonatal unit, we usually send the placenta to a histopathology lab for further examination. This may help determine the reason for admission and sometimes gives us information that could be useful for future pregnancies.

What is a bedside Resuscitaire?

It is a piece of equipment that the team of neonatal doctors and nurses will bring to your bedside at birth, usually if a baby is preterm (less than 37 weeks) or there are concerns with your baby’s condition during pregnancy or labour. It can help us to delay cord clamping for at least 60 seconds. The team can provide support to your baby with breathing and heart rate on this equipment if needed – this is more likely to be necessary if your baby is preterm.

The cord will be attached to your placenta which will typically still be inside your uterus in the first 2-3 minutes, so the team will need to bring the equipment right up to you (as pictured in the simulation) due to the length of the cord. If the cord is too short and the baby needs support from the doctors and nurses, then we may not be able to use the equipment and must clamp and cut the cord sooner than one minute so baby can be assisted appropriately. The benefits of delayed cord clamping do not outweigh the need for adequate breathing support.

There are pictures on the following page that show a simulation of how the bedside Resuscitaire will be used.

Picture 1 shows how baby will be positioned on the bedside resuscitaire and that the equipment may need to come over your leg to get close enough.

Picture 2 shows how the equipment will be positioned if you need to have your legs in stirrups for birth – this would most likely be for those needing a forceps or ventouse (kiwi) delivery.

Picture 3 shows a neonatal nurse providing breathing assistance to a baby on the bedside resuscitaire.

Useful sources of information

Please search the source titles online or use the link / QR codes for access.

Tommy's Delayed (Optimal) Cord Clamping Information (2021)

NICE Quality Statement 6: Delayed cord clamping 2017

St George's Maternity Website – Parent Education Resources

Rabe, H., Mercer, J. and Erickson-Owens, D., 2022. What does the evidence tell us? Revisiting optimal cord management at the time of birth. *European Journal of Pediatrics*, *181*(5), pp.1797-1807.

World Health Organization, 2014. *Guideline: delayed umbilical cord clamping for improved maternal and infant health and nutrition outcomes*. World Health Organization.

Contact us

If you have any questions or concerns, please call the Maternity Helpline 24 hours a day, seven days a week on:

020 8725 2777

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:
Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

Please contact PALS in advance to check if there are any changes to opening times.

The Walk-in and Advisory telephone services are closed on Wednesdays.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough Wing.

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.
Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.
Tel: 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.

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