

A guide to delayed/deferred cord clamping



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What is Delayed/Deferred Cord Clamping?

After birth, the baby's umbilical cord will be clamped and cut, separating the baby from the placenta. There is evidence that babies benefit from a delay before clamping the cord, allowing time for extra blood to flow from the placenta into the baby. This is called deferred (or delayed) cord clamping (DCC). The length of time recommended does vary due to the inconsistency and size of studies but leaving the cord unclamped for at least one minute is widely accepted and this is what we would advise at King's College Hospital.

This leaflet is intended to give you more information about DCC. If you have any questions or wish to discuss anything further, your midwife will be happy to talk to you.

What are the benefits of DCC?

DCC allows extra blood to be transferred from the placenta, increasing the amount of iron transferred to your baby. Iron is essential for brain development and infants with better iron levels seem to do better on tests of neurodevelopment later in childhood.

DCC contributes to keeping the baby's blood pressure stable and helps them adapt to their new environment when they are taking their first breaths. DCC is also associated with significant benefits in premature infants including improved circulation, better red cell blood volume, and reduced risk of some of the complications linked to prematurity (such as bleeding into the brain or problems with the gut).

What are the risks of DCC?

DCC has been shown to be safe and effective, and is recommended worldwide by the World Health Organisation. Whilst there is a small increased risk of jaundice in babies who have received DCC, this is usually mild and doesn't require treatment. However, if required it is treated by placing the baby under blue lights (phototherapy).

What will happen after the birth?

Once the baby is born, they will be dried, wrapped and kept warm whilst being assessed. The length of time taken before the cord is cut and clamped is something which should be considered as part of your birth plan. The baby will normally be placed on the chest for skin-to-skin and the cord will be clamped no sooner than one minute after the birth.

If the baby needs any support with breathing immediately following the birth this can sometimes be done with the cord intact. When babies are born prematurely the cord will be clamped and cut at one minute.

Will any blood tests be taken from the cord?

For some babies born on the obstetric-led delivery unit, we may take blood from the baby's cord to gain information about the baby's wellbeing during labour and identify those in need of further monitoring or support. This blood can still be obtained with DCC. If it is not possible to obtain the blood from the cord, the blood may need to be taken from the baby following birth.

Are there some babies that can't have DCC?

DCC may not be possible to perform if there is a clinical issue at the time of birth. If the baby needs assistance or medical treatment, cord clamping will be done immediately. If there is heavy bleeding following birth, DCC may not be possible and a decision may be made by the doctor to clamp the cord immediately.

Monochorionic twins (twins who share the same placenta) should not have deferred cord clamping. This is because the two babies are connected via the single placenta and there is a small risk that blood could move from one twin into the other at the time of delivery. If one twin has too much blood, DCC would make the situation worse for that baby.

It may also be technically difficult to perform in some situations, such as in twins (who do not share a placenta) or if the cord is very short.

Some babies with abnormalities diagnosed during pregnancy may need medical intervention immediately after birth, and the risks and benefits of DCC will be discussed in order to make a unique birth plan for that baby.

Can I have DCC and donate the cord blood to Anthony Nolan?

DCC will decrease the amount of blood that remains in the umbilical cord, but it is still possible to collect and bank the cord blood.

There is variation from one baby to another in the length of the umbilical cord, the size of the placenta, and the amount of cord blood. Some babies can easily have DCC and still have plenty of cord blood for banking, whereas others may have little cord blood left after DCC. Unfortunately, parents will not know in advance how much cord blood their baby has when deciding whether to plan for DCC.

How do I combine DCC with Cord Blood Donation?

It is possible to defer the clamping of the cord and donate cord blood. Those choosing to have their baby at King's College Hospital will be approached by a member of the Anthony Nolan Cord Blood Collection Team, who will establish the parent's wishes with regards to DCC. This information will be shared with the midwife caring for you in labour. Parents should be aware that DCC may prevent their cord blood donation from meeting transplantation thresholds and therefore unable to be donated to the cord blood bank, but still may be sufficient to be used in research as part of Anthony Nolan's Cord Blood Programme.

If you're interested in donating your cord blood, please go to the Anthony Nolan website to complete the consent form at [anthonynolan.org/cord](https://www.anthonynolan.org/cord)



Where can I find out more information?

More information about DCC can be found on these websites:

National Institute of Healthcare and Excellence

nice.org.uk/guidance/qs105/chapter/Quality-statement-6-Delayed-cord-clamping

World Health Organisation

who.int/elena/titles/cord_clamping/en/

Royal College of Obstetricians and Gynaecologists

rcog.org.uk/en/guidelines-research-services/guidelines/sip14/

Tommy's charity

tommys.org/pregnancy-information/labour-birth/delayed-cord-clamping-dcc

Human Tissue Authority

hta.gov.uk/guidance-public/cord-blood-banking-guide-parents/key-cord-blood-banking-information

anthohnolan.org



Cover image: Dolapo after giving birth to her lifesaver son, Cyprien

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