

Obstetrics Patient information

Cell salvage when you have your baby

What is cell salvage?

Cell salvage is a way of collecting blood lost during an operation and filtering it so that it can be given back to you. It is sometimes called autologous blood transfusion (using your own blood). This might happen when you give birth to your baby by caesarean section. Cell salvage is approved for use during caesarean section by the National Institute for Health and Care Excellence (NICE), the Royal College of Anaesthetists and the Royal College of Obstetrics and Gynaecology.

How is it done?

Blood that is lost during your caesarean section is collected using a cell salvage machine. This machine separates the different parts of your blood and collects just the red blood cells (which carry oxygen). These red cells are washed, filtered and then, if needed, given back to you through a small tube into a vein. Your red cells will only ever be given to you and cannot be used for someone else.

Not every woman who has a caesarean section will have cell salvage but some women might have a greater risk of bleeding during the operation and will therefore benefit from cell salvage. You should ask your doctor or midwife about this.

What are the advantages of cell salvage?

The advantage of having your own blood back is that you are less likely to need a transfusion of blood from a blood donor. This therefore reduces the very small risks that can be associated with donor blood. The National Health Service Blood and Transplant Service (NHSBT), as well as the Welsh and Scottish blood services have leaflets that explain these risk - please ask your midwife or doctor for further information.

Cell salvage is often acceptable to people who do not wish to have a transfusion of donor blood for reasons of faith, such as Jehovah's Witnesses, or for other reasons.

Also, if you are a blood donor and have received only your own salvaged blood, but no donor blood, it may be possible for you to continue as a blood donor when you have recovered from having your baby. People who have received donor blood (or any other blood component) since the first of January 1980 cannot be blood donors. This is due to the very small risk of transfusion transmitted infections, including variant Creutzfeld Jakob Disease (vCJD).

What are the concerns?

There have been two main concerns about using cell salvage during caesarean section.

The first is that amniotic fluid, the 'waters' that surround your baby in the womb, could enter your bloodstream and cause harm through an allergic reaction. However, cell salvage has been used in caesarean sections for many years and there is no evidence of this happening.

The second concern is that a small amount of your baby's blood can get into your bloodstream and you might develop antibodies. During any future pregnancies, these antibodies could then harm your baby while still in your womb. The most common cause of this type of harm is when you are Rhesus D (RhD) negative and your baby is RhD positive.

There is the potential for these antibodies to be made throughout the pregnancy if you are RhD negative (and not just during cell salvage). To prevent these potentially harmful antibodies from being made, if you are RhD negative, you should be routinely offered an injection of Anti-D immunoglobulin (Ig) during your pregnancy, and within 72 hours of having your baby (if your baby is RhD positive). The same anti-D Ig can be used after cell salvage to prevent these antibodies from forming. Again, the National Health Service Blood and Transplant (NHSBT), as well as the Welsh and Scottish blood services, have leaflets that provide further information regarding antibodies in pregnancy and anti-D Ig- please ask your doctor or midwife.

Why might it not be suitable for me?

At the moment cell salvage is only available if you are having a caesarean section to birth your baby.

Where can I get more information?

Ask your hospital doctor or midwife if cell salvage is suitable for you or if it is needed during your caesarean section. Alternatively they can ask the specialist cell salvage practitioner to contact you to discuss cell salvage further.

Contact details

Maternity Department 0300 019 2319

Poole Hospital, Longfleet Road, Poole, Dorset, BH15 2JB

Author: Mark Pope Date: January 2022 Version: Four Review date: January 2025 Ref: 032/22

t: 01202 665511 w: www.uhd.nhs.uk 🗾: @UHD_NHS 📑: @UHDTrust 🤘: @uhd_nhs