

Document Title: <u>Cord Blood Collections (Private)</u>	1 of 6	Approval Date: <u>7/2/24</u>
Reference Number: <u>UHBOBS033</u>		Next Review Date: <u>7/2/27</u>
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Cord Blood Collections (Private) Guideline	
Introduction and Aim	
<i>To clarify the guidelines for the collection of cord blood samples within obstetrics.</i>	
Objectives	
<ul style="list-style-type: none"> To provide a guideline for patients who wish to arrange cord blood collection 	
Scope	
This procedure applies to all of our staff in all locations including those with honorary contracts	
Equality Health Impact Assessment	<i>An Equality Health Impact Assessment (EHIA) has not been completed</i>
Documents to read alongside this Procedure	<i>List all documents the reader is advised to read alongside / in support of this document</i>
Approved by	<i>Maternity Professional Forum</i>

Accountable Executive or Clinical Board Director	<i>Ruth Walker, Executive Nurse Director</i>
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Disclaimer	
If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governance Directorate .	

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Summary of reviews/amendments			
Version Number	Date of Review Approved	Date Published	Summary of Amendments
1		Nov 2009	New Document
2	Nov 2012	Nov 2012	
3	03/11/2017	Nov 2020	Reviewed with minor amendments September 2017
<u>4</u>			<u>Updated</u>

Private Cord Blood Collections

Rationale

The request for parents to allow the procurement of cord blood samples during the birth of a baby is becoming much more common due to the publicity around scientific advances and the use of stem cells.

Definition of a Stem cell

Stem cells are cells from which other types of cells can develop. Blood stem cells perform the function of replenishing the supply of the red blood cells, white blood cells and platelets.

- Stem cells are capable of self division and self renewal over a long period of time
- Stem cells are unspecialised – they lack tissue scientific functions and structures.
- Stem cells give rise to specialised cells – differentiation

Most of the stem cells are found in the bone marrow, peripheral blood and also the placenta/umbilical cord. The procedure for collecting stem cells requires the blood to be taken from the placenta or umbilical cord immediately after the birth and then banked for future use. The umbilical blood is rich in stem cells that are capable of adapting in the body and replacing damaged or diseased cells. Stem cells taken from

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the cord blood at birth have a much higher chance of being supported by the body than healthy cells imported from a donor.

Use of Stem cells

☑ Stem cells have been used for the treatment of leukaemia, lymphoma and multiple myeloma

☑ Medical advances to cure other cancers, heart disease, spinal cord injuries, Parkinson's disease and Alzheimer's

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Types of Cord Blood Collection

Non directed voluntary donations

For those with no suitable family member, cord blood banks have been set up along similar lines to registries of bone marrow donors, only certain hospitals have been identified for banking in the UK.

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Directed donations in at risk families

Some transplant centres currently recommend cord blood collection and storage for siblings born into a family where there is a known genetic disorder, which may be treated by stem cell transplantation.

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The clinician caring normally initiates such donations for the sick potential recipient, making appropriate arrangements with the National Blood Service Cord Blood Bank.

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Directed donations in low risk families

At present it is difficult to estimate the likelihood that a directed donation from a low-risk family would be used and more research is needed including clinical trials before the potential use of umbilical cord stem cells can be realistically estimated.

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Commercial umbilical cord blood collection is increasingly being advertised to families as an insurance against any future health problems their children may develop or storing a spare immune system for their children.

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This service is currently being marketed in the UK for a cost of up to £1000 – storage for 20 years.

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Problems associated with the collection of cord blood;

☑ There are a number of practical issues, which give cause for concern when a request for personal umbilical cord blood storage is made.

☑ Consent procedure and associated paper work is time consuming for midwifery staff.

☑ The collection procedure requires the cord blood to be taken shortly after the birth of the baby – when other aspects of care may require attention.

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The requirement to obtain a large volume of cord blood to ensure successful transplanting can be distracting when the midwife is responsible for the mother and newborn infant.

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There is a risk of contamination during the procedure.

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Risk of incorrect labelling – identification of sample.

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Parents also need to be aware of the potential risk of the sample going missing etc in the transportation process.

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Other specific issues requiring consideration/attention include:

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Prematurity – early cord clamping is disadvantageous to babies

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Nuchal cord – cord around the baby’s neck may require the cord to be cut prior to birth – practitioners should not be pressured to avoid cutting the cord.

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Multiple pregnancy – the logistical burden of collection increases at multiple births.

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3 Recommendations

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Collection of cord blood when medically indicated for at risk families is an acceptable procedure. Counselling and collection arrangements should be made through the National Blood Service, who will also arrange staff training in sample collection.

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Collection in [ABMU Cardiff and Vale UHB](#) Health Board must be undertaken by a trained third party – this person can be organised by the family or via the commercial company. Health Board staff will not be undertaking this collection.

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For those women wishing to make voluntary donations, they must be advised to contact the NHS Cord Blood Bank who will advise them of the specific hospitals where this is undertaken.

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If women want this service and are not willing/able to pay for a third party person, they should be advised to contact other local units who may provide this service. It is not the responsibility of the midwifery team to locate other units for the women.

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Any advice/discussion regarding this request must be documented in the maternal notes.

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For directed donations where transplant centres have recommended cord blood collection and storage from siblings born into a family where there is a known genetic disease amenable to HSC transplantation should be transferred to a maternity services local to the centre where arrangements are already in place for collection.

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Health Board position

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With the above recommendations in mind the Health Board will only support women who wish to have their cord blood collected for stem cells if a trained third person undertakes this procedure.

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All staff should be conversant with this guidelines so a woman or her family requesting cord blood collection can be informed of the Health Board’s position.

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The organisation employing the third person needs to communicate with the midwifery management and provide evidence that the third person has under gone

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the appropriate checks such as criminal records bureau (CRB) and been trained to take the cord blood. The organisation needs to provide details of the third person's indemnity insurance for them to be able to practice on Health Board premises.

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A detailed management plan should be written with the woman during the antenatal period and placed in her maternity notes. Reference to the plan should be documented in the All Wales Maternity Records, Intrapartum Plan of Care section.

~~The Cardiff and Vale NHS Trust does not support private Cord Blood Collections, in line with RCOG and RCM Guidance.¹~~

~~The UHB does not have a Human Tissue Authority Licence.²~~

~~Couples must be advised antenatally of the C & V UHB's policy and the discussion recorded in the Maternity Records.~~

~~If a couple wish to collect their own cord blood, they are legally entitled to the placenta and can obtain any samples. Trust staff cannot and must not assist in the procedure. The couple must provide their own testing kits.~~

~~If cord blood collections are medically indicated, the Consultant Obstetrician must make all the necessary arrangements with the National Blood Transfusion Service in Bristol:~~

~~Stem Cell Collection Service
National Blood Transfusion Service
Southmead Road
Bristol BS10 5ND
Tel 0117 950 5050~~

References:

1. RCM/RCOG Joint statement on Umbilical cord blood collection and banking. 2011.
2. Human Tissue Authority (HTA)'s position statement on cord blood collection 2010.

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Cord Blood Banking in Maternity Services Information for Women

People in the UK occasionally consider storing cord blood with a private bank in the hope that in the future, cord stem cells may be useful should a member of their family develop a disease treatable by stem cell therapy.

When you make your decision please consider these points:-

- The chance of your child ever needing to use their own cord blood is extremely rare, and there is no guarantee that the cord blood will be an appropriate treatment in the future.
- If you have a known genetic condition in your family, and you are advised by a geneticist to consider cord blood banking, your birth should take place in a hospital where NHS cord blood banking is available. There are very few hospitals in the UK that can provide this at the moment.
- Currently there is no NHS funded service for the collection of cord blood in Wales.

When you are pregnant

If you wish to store cord blood, you should ensure that you select a company who is registered with the Human Tissue Authority. Only suitably registered companies will be allowed entry to the labour ward and your choice should be made clear in your birth plan.

At the time of your baby's birth

When your baby is born, the maternity service staff may have to put your health needs first in an emergency or urgent situation. There is a chance that the placenta and cord might not be released or available to the collecting company to allow blood collection at an optimal time, if an urgent situation arises.

The company will send a cord blood collector who will be given visitors access to your birth room, where the collection can take place in your presence. Your birth partner will be responsible for accompanying them on the labour ward. The midwife is able to hand the placenta and cord to the cord blood collectors in the birth room.

The midwives and midwifery managers cannot give access to the private companies for the use of any other labour ward facilities.

Advice

Searching the internet for cord blood banking gives many international sites. The maternity service do not endorse the use of any particular private company and are not able to provide advice in respect of cord blood banking as this is not an NHS service. You may find the following helpful:-

Royal College of Obstetricians and Gynaecologists www.rcog.org.uk
Human Tissue Authority www.hta.gov.uk