



## Postnatal Guidelines

### No.4 Commercial Umbilical Cord Blood Collection

#### 1. Statement

Based on the recommendations of the RCOG (2006), RCM (2011) and the National Health Service Litigation Authority (NHSLA), the Women and Children's Division of Plymouth Hospitals NHS Trust support the commercial collection of umbilical cord blood for stem cell.

Should the woman and her family request cord blood to be collected for the retrieval of stem cells, they should arrange for this to be carried out via a private company wherever possible. The Trust will cooperate as far as possible with this, and become involved where needed, providing it is safe to do so. Midwives should follow the appointed company's instructions for collecting cord tissue. Guidance is given during the mandatory training week from the Trust preferred partner in commercial blood banking company. If a Midwife has not undergone this training, they should not become involved in the procedure. If a woman should make her requests for stem cell retrieval known at any time, she should be advised of the Trust's position, and that the Trust cannot take any responsibility for failure of collection or contamination of the sample at any stage in the retrieval process.

***All Trust staff should be aware that the NHSLA does not indemnify the Trust for any form of loss (personal or otherwise) that may occur as a result of the collection and/or storage, by Trust staff, of umbilical cord blood.***

#### 2. Reasons for declining stem cell collection

Staff who are approached to assist women in obtaining stem cells should decline to do so if the following situations arise:

- Staff shortages - The use of staff (midwife or medical) to collect the cord blood may distract them from the care of this or other patients, especially if routine observations are required.
- Further intervention needed due to postpartum haemorrhage or other maternal risk factors such as pre-eclampsia, where regular observations need to be undertaken.
- Umbilical cord samples for blood gases are needed. They are to take priority over the collection for stem cells.

Additional issues surrounding collection of cord blood for stem cells include prematurity, cord around the neck, caesarean section, multiple pregnancy and delay in skin-to-skin. Quality and Safety for Human Application (Q and S) Regulation (2007) and the Human Tissue Authority (HTA) require that any person collecting umbilical cord samples for stem cells must be acting under the authority of the HTA licence or a Third Party Agreement, and must be appropriately trained to undertake the safe collection of the cord blood.

Collection does not necessarily have to be taken whilst the placenta is in utero, it can be undertaken after the placenta is delivered.

In the management of the third stage of labour where stem cell collection is to be performed, the midwife is to cooperate with the family and private company as far as it is possible.

The midwife is to ensure compliance with this guideline should obtain verbal and/or written consent from the mother on admission to the hospital.

- Manage the third stage of labour in usual manner, as per the wishes of the woman.
- Clamp and cut the umbilical cord.
- Collect the umbilical cord segment for cord blood gas analysis if indicated.
- Allow private company to retrieve cord blood whilst placenta remains in utero, if safe to do so, or midwife to collect following the Trusts preferred partner instructions for Collecting Cord Tissue.
- Continue to deliver the placenta as appropriate for clinical conditions.
- If private company or midwife unable to obtain cord blood sample before delivery of placenta, allow company and midwife access to the placenta after completion of the third stage. (This will be the case for caesarean sections).
- In any emergency or urgent situation, verbal consent to be obtained from the mother to discontinue cord blood collection in order to provide the necessary care.
- Acquire maternal blood sample.
- Attain maternal consent to dispose of the placenta, particularly when there isn't a trained professional from private company or midwife to collect blood sample (Night shift/bank holiday).
- At no point is the midwife responsible for failure of collection or contamination of the sample during collection.

### **3. Management of stem cell collection with LSCS**

It is still possible to obtain an umbilical cord blood for stem cell collection after the delivery of the placenta (C. Parfumi et al. 2004). This would be the case if a caesarean section is performed either electively or for an emergency. This should be performed in the sluice by the person employed by the parents to take the sample. This person does not need to 'scrub' or enter the theatre at any stage.

### **4. Record keeping**

In keeping with the NMC Code (2015) and Trust Policy, staff should document clearly, chronologically and contemporaneously as soon after the episode as possible, making sure each entry is dated and timed with a signature and printed name.

## Monitoring Audit

### Auditable standards:

Please refer to audit tool, location: 'Maternity on cl2-file11', Guidelines

### Reports to:

Clinical Effectiveness Committee – responsible for action plan and implementation of recommendations from audit

Clinical Governance & Risk Management Committee

### Frequency of audit:

Bi Annual

### Responsible person:

CDS Midwife

## Cross references

Antenatal Guideline 31 - Maternity Hand Held Notes, Hospital Records and Record Keeping

Antenatal guideline 44 – Guideline development within the maternity services

## References

Biovault Family(2002) *Umbilical Cord Blood and Stem Cell Storage and Banking* [online]  
[info@biovaultfamily.com](mailto:info@biovaultfamily.com)

*C. Pafumi, G. Milone, I. Maggi, R. Mancari, M. Farina, A. Russo, G. Pernicone, S. Bandiera, P. Giardina, A. Franceschini, A. E. Calogero, A. Cianci, 2004. Umbilical cord blood collection in Cesarean section: a comparison before and after placental delivery. Archives of Gynecology and Obstetrics, 266, 193-194.*

*Human Tissue Authority (HTA, 2010) Position Statement on cord blood collection [online]*  
<https://www.hta.gov.uk>

*Human Tissue Authority (HTA) (Quality and Safety for Human Application(Q&S) Regulations, 2007) Issue number 1523: Human Tissue*

*Nursing and Midwifery Council (NMC, 2015) The Code*

*Royal College of Obstetrics and Gynaecology (RCOG, 2006) Scientific Impact Paper No. 2: Umbilical Cord Blood Banking*

*Royal College of Midwives (2011) Position Statement: Commercial Cord Blood Collection*

**Author**

Guideline committee

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