

VENICARE™ A New, Safe and Cost Effective System to Aid Venepuncture

Venicare™ is a heat and cold based system to help improve a patient's experience of blood donation or testing. The packs have been used for many years for the treatment of bruising and strains associated with sport and other physical exercise. The RICER protocol for the treatment of sprains and strains is well researched and is part of general first aid training. However these products are not widely used in the UK to assist with venipuncture.

When taking blood a well dilated vessel is ideal. In order to achieve this, there is anecdotal evidence of the use of latex gloves filled with warm water, water filled wash hand basins or bowls and even patients bringing in their own hot water bottles. They may be successful methods, but at the very best will be time consuming and often can be very messy.

Venicare™ Instant Warm Packs covering an area of 350cm² will quickly and effectively deliver warmth at 40° C. They are single use to avoid cross infection and the non-toxic packs can be disposed of in the normal waste process. At a cost of less than £0.50p (subject to delivery type), the packs offer a fast, safe and cost effective method to improve patient care.



Venicare™ Instant Cold Packs help with the treatment of haematomas resulting from venipuncture. The reduction of swelling will enable the area to recover more quickly with less tissue damage and with reduction in pain. Where vessel dilation is not an issue, the cold packs can help with blood taking as the cold will reduce sensation during venipuncture.

Venicare™ Instant Warm and Cold packs are a low cost, fast, safe and cost effective method to improve patient care. Both Venicare™ packs have non-woven sleeves to soften the applications of the packs and full instructions are available with the packs for their use including duration of application, when and when not to use and the method of disposal. The packs are also available with child friendly artwork.

Currently we are trialling the products in busy Phlebotomy departments in throughout the country and are offering free packs for any departments who wish to evaluate them. To evaluate or take part in our test and receive the free packs please either email trial@venicare.co.uk or call Venicare on 0800 180 4285.

Martyn Bright
Managing Director, Venicare™

COURSES

Train the Trainer

Aim:
To provide an overview of various teaching methods, which can be effectively used to deliver the Phlebotomy Training Programme.

Forthcoming Training

Date: **16th & 17th November 2013**
Venue: **Ashford Middlesex**

Date: **1st & 2nd March 2014**
Venue: **Telford Midlands**

Date: **17th & 18th May 2014**
Venue: **to be confirmed**

Date: **5th & 6th July 2014**
Venue: **to be confirmed**

Date: **20th & 21st September 2014**
Venue: **to be confirmed**

Paediatric Venepuncture Training

For Experienced Phlebotomists Only.

Aim:
To provide the underpinning knowledge and basic skills to safely perform phlebotomy on babies and children from 1 year.

Forthcoming Training

Date: **January 2014**
Venue: **to be confirmed**

Date: **April 2014**
Venue: **to be confirmed**

Date: **June 2014**
Venue: **to be confirmed**

NAP News is sponsored by Greiner Bio-One greiner bio-one

Editorial content is the responsibility of NAP and/or any relevant author.

NAP



Stem Cells and Umbilical Cord Blood Phlebotomy – Exciting New Opportunities for Phlebotomists!

Increasing numbers of parents world-wide are choosing to invest in future stem cell treatments and therapies by banking their children's surplus umbilical cord blood at birth. Meeting the growing demand for this specialist phlebotomy service presents exciting new employment opportunities for phlebotomists who wish to expand their individual role and skills and / or extend current phlebotomy services both within and across the NHS and independent sectors.

Why cord blood?
Cord blood stem cells are already highly valued for their use in an increasing number of therapeutic and life-saving treatments because their unique properties enable successful transfusions in patients who cannot find a close enough match for a bone marrow or adult blood transfusion; transplants generally cause fewer complications associated with rejection too¹. As a direct result, 1 in 100 cord blood units collected annually are used for transplant compared to only 1 in 1000 of adult bone marrow donations.¹ Other important advantages are that umbilical cord blood and tissue provide by far the richest source of a variety of stem cell types, the collection procedure is non-invasive and this blood and tissue would otherwise be discarded as medical waste.

The NHS cord blood bank relies on public donation and it's woefully undersupplied

to meet the current demand for stem cells - in 2011/12 over 80% of the cord blood units used by UK transplant centres, came from cord banks overseas and 2 people still miss out on a transplant every day¹. Donated cord blood is collected from only 11 hospitals nationwide (just 3 outside London) so 65,000 litres are still thrown away every year in the UK.²

This is despite the fact that cord blood and tissue derived stem cells are an increasing focus of research into regenerative medicine therapies as well. These exciting treatments are designed to harness the body's own ability to repair or re-grow damaged tissue with a transfusion or application of a person's own perfectly matched stem cells. Brain injury and neuro degenerative disorders such as Parkinson's, MS, Arthritis, Diabetes, Sickle Cell and Bone fractures are just a few of the conditions treated with cord blood derived stem cells in recent and/or ongoing clinical trials.³

Based on proven clinical therapies already in regular use, it has been estimated that 1:200 of us could benefit from a cord blood transplant in a lifetime. However, if only the current regenerative medicine trials become mainstream clinical practice, it has been calculated that 1:5 people could benefit from treatments using their own stem cells.⁴ As new therapies become available in the future children whose cord blood was stored at birth could be among the first to benefit,

Continues overleaf >

New Blood Needed

Dear All ,

The AGM / Conference held in April was a roaring success, the enthusiasm was inspiring. We all enjoyed the social evening on the Friday night, followed by an excellent educational program on the Saturday. Many thanks to our informative speakers on stem cell collection, preanalytical phase, National blood transfusion audit, Phlebotomy errors, sharps legislation and modernising Scientific Careers band 2-4.

Our next conference will be 2015 but please do not wait that long to get in touch or involved – with more and more NHS Trusts moving towards networking this is an ideal opportunity to develop local phlebotomy groups which filter into NAP this way we can disseminate information on local and national strategies.

NAP are working hard with the Academy for Healthcare Science (AHCS), as always we are constantly pushing for regulation and discipline specific qualifications. There is a pathway for band 2 -4 staff providing the opportunity to progress, see MSC chart overleaf.

The Committee are still looking for phlebotomists that can contribute to the running of the association – the rest of the committee are getting old! so we need some fresh new blood!

Take care
Jacqui



which is why increasing numbers of parents world-wide are choosing to store umbilical stem cells each time they have a baby.

Procedure and logistics

Cord blood is collected from the remaining cord and placenta after birth or Caesarean section and after the cord has been clamped and cut. It needs to be done as soon as possible after the placenta delivers (before the blood clots). The collection usually takes place outside of the birth room or theatre and consists of a gravity drain of the cord blood into sterile blood bags via sterile venepuncture of the umbilical cord vessels with a large bore needle; a technique easily taught to proficient phlebotomists.

All of the necessary equipment (including uniquely bar coded blood bags) is supplied to the parents in advance and brought by them to the hospital, when the mother is in labour /due to deliver. The cord blood phlebotomist is required to attend before the baby's birth (to have time to prepare a collection area, equipment and paperwork), take a maternal blood sample (standard adult venepuncture using an **evacuated blood tube**), carry out the cord blood and tissue collection and finally leave the packaged samples with the parents ready for courier return to the storage bank.

Cells4Life LLP is the largest private cord blood bank in the UK.⁵ It stores individual cord blood and tissue for the life time use of the baby and or other family relatives who prove to be sufficiently closely matched e.g. siblings. Like the NHS cord blood bank, private storage banks are strictly regulated by the Human Tissue Authority and only trained and licensed clinical staff are permitted to collect and process cord blood units.⁶ Usually, private cord blood collection in both NHS and private hospitals is carried out by independent, specialist phlebotomists who are called to attend when a baby is about to be born. This can present obvious difficulties in relation to journey planning and efficient time management, problems which are far easier to manage if the collections are done by licensed phlebotomists on site or on call close by.

Models for Service Delivery

1. Directed NHS cord blood collection for immediate use (usually by a sick older sibling awaiting a potentially life-saving transplant / treatment) – carried out by NHS licensed cord blood phlebotomists in maternity units close to Children's Hospitals, although occasionally independent phlebotomists are employed to do these collections too.

2. NHS donation – carried out by NHS trained and licensed phlebotomists employed in one of the 11 NHS hospitals currently funded to collect cord blood for public use.

3. Private storage - collection by an external phlebotomist, additionally trained and licensed by private cord blood banks. These phlebotomists are usually self-employed but contracted to a private cord blood phlebotomy service / agency through which they are allocated and paid for cord blood collections for more than one independent cord blood bank, in both NHS and private hospitals, within a locality.

The phlebotomy agency organises pairs and teams of self-employed phlebotomists to maintain a 24/7 cord blood phlebotomy service, enabling individuals to have time off whilst also covering emergencies. The agency receives collection fees directly from the blood banks. Pay rates for phlebotomists vary but often consist of a flat fee of between £65 and £140 per collection plus excess travel expenses. Several of these phlebotomists successfully combine part-time hours as self-employed cord blood phlebotomists with on-going contracts as NHS employees.

4. Partnership model with the NHS – collection by trained and licensed NHS employees / on site staff, funded via a referral fee contract with Cells4Life LLP. In this model, identified hospital staff e.g. doctors, midwives, phlebotomists, maternity care assistants are trained and licensed to carry out cord blood collections where they work, as part of their normal duties. Contracts might be with the hospital or Trust as a whole, in which case, the hospital or individual department (maternity or phlebotomy) receive a referral / collection fee directly from Cells4Life LLP. Fees are more than sufficient to provide the additional staffing requirements for a 24/7 cord blood collection service so actually represent an additional funding stream for the Trust / Hospital / Department.

5. Partnership model with hospital staff working independently / self-employed – like the above except the referral / collection fee contract is between Cells4Life LLP and a group of trained / licensed individuals (e.g. part time / retired phlebotomists, midwives, maternity care assistants) who between themselves can guarantee to organise and maintain a 24/7 cord blood collection service for their own hospital and / or other neighbouring hospitals. Referrals and collection fees come directly from

Cells4Life LLP and an individual phlebotomist can expect to be paid significantly more per collection than might be paid via a phlebotomy agency / service.

It is difficult to accurately predict the number of collections any one hospital can expect. In the NHS hospitals where cord blood can be donated, all pregnant women receive literature about the value of cord blood stem cells and can therefore make an informed choice about whether to donate or store privately. In most other hospitals, information is at best patchy, usually non-existent, so many parents are simply not aware of the choices available to them. Parents who already know about the huge potential for future stem cell therapy e.g. those with a medical background, still rely on internet searches and word of mouth recommendations regarding their options.

Hospitals and phlebotomists working in partnership with Cells4Life can certainly increase the number of collections locally, simply by raising awareness of the possibility of stem cell salvage from cord blood. Couples still have to research all their available options in order to make a properly informed choice, but in our experience, it's a topic which always attracts interest within antenatal clinics, classes and on line forums. With every advance in stem cell technology, the discussion gets louder and spreads further and more parents make the decision to invest in their children's future health. Do contact us if you'd like to be involved in this exciting new future too!

Jo Taylor (RM)

Clinical Liaison & Trainer for Cells4Life LLP
Tel: **01444 873953** Mob: **07944 430136**
Email: **j.taylor@cells4life.com**

References

1. www.anthonynolan.org/cord-blood The Anthony Nolan charity collects for its own public cord bank from 5 hospitals: The Royal Free and King's College Hospitals in London; The Birmingham Women's Hospital; The Leicester Royal Infirmary and The Leicester General.
2. www.nhsbt.nhs.uk/cordblood/howtodonate/wherecanidonate/ The NHS Cord Blood Bank collects from the following 6 Greater London hospitals: Barnet General; Luton and Dunstable; St George's; Northwick Park; Watford General and University College Hospital.
3. www.clinicaltrials.gov
4. Harris DT (2008). "Cord Blood Stem Cells: A Review of Potential Neurological Applications" *Stem Cell Rev.* 4: 269–274.
5. www.cells4life.com Cells4Life LLP - The experts in stem cell storage. Units 2 & 3 Oak House, Albert Drive, Burgess Hill, RH15 9TN.
6. www.hta.gov.uk/ The Human Tissue Authority - controls, regulates and licenses the collection, use and storage of human blood and tissue in the UK.

Modernising Scientific Careers Training pathways



This factsheet summarises the training and development routes available to the healthcare science workforce and those under development within the Modernising Scientific Careers (MSC) programme.

Healthcare science assistant and associate (career levels 1 to 4)

Healthcare science assistants work towards vocational qualifications. Often apprenticeships are used as a training route. Healthcare science associates are commonly trained through a higher level apprenticeship, foundation degree or diploma.

Many organisations are familiar with developing their wider support workforce using these education routes and already have arrangements in place. Through MSC a national learning and development framework has been developed. Once implemented, the modular framework will provide a national learning structure for assistants and associates with vocational awards and qualifications. It is anticipated that the first tranche, approved by an awarding body, will be ready in March 2014.



Healthcare science practitioner (career level 5)

Healthcare science practitioners are now trained through NHS approved and accredited BSc honours degrees through the Practitioner Training Programme (PTP) in various themes of healthcare science.

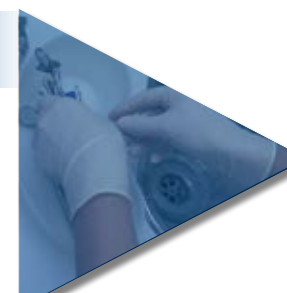
Offered by a number of universities across England, the programmes include academic learning and workplace-based training. The 50+ week workplace-based training element, supported by competency based learning guides, is spread over three years, involving broad scientific training in the first two years with an increasing focus on a chosen specialism during year three.



Clinical scientist (career level 6)

The Scientist Training Programme (STP) is a graduate-entry programme of work-based learning, underpinned by a university accredited master's degree.

Trainees are employed by an NHS trust for the duration of the programme and will be required to spend time in a range of settings, before specialising in the last two years of the programme. The STP national recruitment process is managed by the [National School of Healthcare Science](http://www.nshs.ac.uk) and begins at the start of each calendar year, typically with an advertisement placed in *New Scientist* and jobs.ac.uk, and is supported by NHS Careers.



Consultant clinical scientist (career levels 8 and 9)

Higher Specialist Scientific Training (HSST) is a five-year workplace-based programme underpinned by a doctoral level academic award.

HSST will ensure future workforce supply of very senior clinical scientists in specialist areas through quality-assured programmes. The workplace-based education and training programme curricula have been developed in the initial specialisms, with the first HSST programmes expected to be in place during 2014. Employers are working with their local training and education boards to identify workforce demand and capacity for programmes.



Accredited Scientific Practice (ASP) programmes

Underpinning the training routes for the healthcare science workforce is the development of structured career progression at every point within the career framework.

Accredited Scientific Practice (ASP) will have two aspects to it: academic learning and the assessment of workplace-based competencies. The workforce will be able to undertake further specialist training through ASP programmes as part of their employment, gaining specialist skills without the requirement to advance to the next level of the career framework. Project groups are being established to develop curricula, working with professional bodies to develop online assessment content and to formalise proposals.

www.nhsemployers.org/healthcarescience

