

Experienced Phlebotomist Required

Scotland / Wales / Devon / Newcastle / Manchester / Northern Ireland and Hampshire areas

Must have:
Current CRB / Hep. B certificates / Full UK driving licence and be willing to travel.
Cord blood procurement training provided for the right candidate
Excellent rates of pay.
Some unsociable hours necessary.
Please note, this is a self-employed role.

Contact:
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24 The Strand
Derby
DE1 1BE
Tel: 01332 380777
Fax: 01332 639975
Mobile: 07740 278766

www.phlebotomy-uk.co.uk



Experienced locum Phlebotomists available at competitive rates

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- ♣ Fully Vetted
- ♣ Personally met
- ♣ Reliable career minded Phlebotomists
- ♣ Available at short notice

For all your needs or if you have any enquiries contact the phlebotomy team on:

02076144260/ 07950724318

or email

richard@sugarmanmedical.co.uk

A.G.M. 2013

Safety
Safety
Safety

is the theme for NAP's 2013 AGM Conference.

It is to be held at
The Whitehouse Hotel ,
Telford, TFI 2NJ
on
26th & 27th April 2013

Day 1: 26th April
AGM & Information Forum

Day 2: 27th April
Day of Education
agenda TBC

Cost for 2 days
£100 (including overnight accommodation)
or £50 for 1 day

Early booking advised!

For early bookings contact the website.

www.phlebotomy.org

NAP

The Newsletter of the National Association of Phlebotomists August 2012 Volume 12.2



Phlebotomy Based Sampling Errors

Part 2 – by Roger Hoke

Basic sample requirements

When being examined by a doctor, the patient is present and able to confirm those all important details such as their full name and date of birth. When examination takes place on a specimen of blood or other tissue, the analysis usually takes place remotely from the patient, in another department, sometimes on another day and almost always by staff who have never met the patient. Accuracy in identifying the patient, obtaining a representative sample which is correctly labelled is a basic pre-requisite and is vital for accurate diagnosis and treatment. This responsibility falls on whoever takes the sample. The enormous range of staff groups undertaking phlebotomy may produce varying standards as each group such as doctors, medical students, nurses, midwives, technicians and healthcare assistants often have their own perception of competency.

The process of blood sample collection and analysis comprises multiple stages and numerous interactions between the patient, technology and a great many healthcare staff. Each of these stages and interactions provides the opportunity for errors to occur.

The pre-analytical phase

This phase covers the sample up to analysis on the laboratory bench or machine and for convenience may be subdivided into a pre-sampling, sampling and the

post-sampling stage which includes transportation to the laboratory and processing in the Laboratory Reception.

The Pre-sampling Stage

This starts with the request form being generated and obviously requires that the correct patient details are used. This is especially important where request forms are still hand written by medical staff where transcription errors can easily occur such as variations in the spelling of a patient's name such as Claire, Clair and Clare. The potential for error in mixing up patients is huge hence the increasing use of bar-code technology. But no matter how sophisticated these devices are, human vigilance is still a very important part of the process. Whilst these devices reduce many common errors, they can cause new, unexpected problems such as in one incident where a phlebotomist using bar code technology scanned a patient's ID Band and the details were sent to the printer buffer for label printing later. The phlebotomist was unable to obtain a sample and went to the next patient where a sample was successfully obtained. Labels were printed but unfortunately these were from the previous patient and the samples were mislabelled as a result. The phlebotomist was expecting the machinery to perform the checking and labelling process for her so didn't feel there was a need to duplicate the machine's function. ▶



Hi,
It's been a fast moving year with many changes both politically and clinically – it's important that we all stay ahead of the game! This year's conference is all about Safety and education, I'm always amazed at how many Phlebotomists never get to see new products and trust me the companies have produced some innovative designs to meet the market demands.
Push to attend the conference you deserve Phlebotomy specific education and we plan to facilitate a friendly informative conference that will revive your passion for Phlebotomy.
See you there!
Jacqui Hough

Forthcoming Training

Full Aims and Objectives are on the website or on request at jacquelinehough@aol.com

Paediatric Venepuncture

(for experienced Phlebotomists only)
10.00 to 16.00 hours £100 members £175 non members

22nd September 2012
13th October 2012

Birmingham Children's Hospital
Ashford Hospital Middlesex
(near Heathrow Airport)

12th January 2013
18th May 2013

Birmingham Children's Hospital
Birmingham Children's Hospital

Train the Trainer

(for those involved in Training) 2 Day course £500 member's, £650 non members

29th & 30th September 2012
24th & 25th November 2012
9th & 10th February 2013
18th & 19th May 2013

Telford Whitehouse, Midlands
Telford Whitehouse, Midlands
Telford Whitehouse, Midlands
Telford Whitehouse, Midlands

Training can be organized for individual work places, please contact jacquelinehough@aol.com for any enquiries or download a booking form from www.phlebotomy.org



Many of the 'Wrong blood in tube' incidents reported by SHOT (Serious Hazards of Transfusion) are due to errors at the pre-sampling stage. One of the problems may be that when some staff check patient details they expect them to be correct and look for confirmation rather than seeking potential errors.

The Sampling Stage

Having identified the patient correctly there are still factors which can lead to erroneous results. Those known to cause analytical errors include prolonged tourniquet time which should be 1 minute maximum. If necessary the tourniquet should be released and reapplied if successful venepuncture has not been possible within one minute. Prolonged tourniquet time of three minutes has been shown to raise a number of serum components such as Total Protein, Lipids, Cholesterol, AST and Bilirubin by 5 – 10%, prolonged tourniquet times have adverse effects on blood analytes which may lead to erroneous results. Avoid asking patients to repeatedly open and close their hand to pump the vein up as this has been shown to falsely raise the potassium.

The order of draw should also be followed to prevent the possibility of carry-over of tube additives such as potassium EDTA or sodium fluoride oxalate which could significantly alter biochemistry results. Other errors include under or over filling the tube, using the incorrect tube, or struggling to obtain a sample with the result that haemolysis occurs rendering the sample untestable.

Fasting may also be required and is important for some components where diet may influence results such as glucose or triglycerides. Normally fasting is not required for cholesterol. Timing may also be crucial for some blood components that undergo diurnal variation such as corticosteroids. Timing is important for all tests used to monitor drug therapy such as antibiotics as the drug levels will

quickly rise after administration (peak) and gradually fall over the next few hours (trough). Because many of these medicines can be toxic in high doses, it is important that safe levels are not exceeded nor fall below therapeutic levels.

Other considerations include whether the sample is required to be kept at body temperature or placed on ice.

The Post-Sampling Stage

This stage covers labelling the sample at the bedside or drawing area from the ID Band (in-patients) or Request Form (out-patients). This may be either hand written tube labels or attaching printed labels and subsequent dispatch to the laboratory. Most laboratories will have their own guidelines for transportation, packaging and time for samples to reach the laboratory reception.

Samples should be dispatched to the laboratory as soon as possible after collection. Biochemistry samples should not be refrigerated unless centrifuged first. Samples should be allowed to stand for about 30 minutes prior to centrifugation to allow adequate clot formation and serum separation. Where samples have been refrigerated prior to analysis reports have shown falsely raised potassium. One research paper described seasonal variations in potassium levels simply through samples from a GP surgery being transported in the cold during the winter period. Avoid leaving samples in direct sunlight as UV light breaks down bilirubin resulting in lower values and heat sources including strong sunlight can denature proteins by a process commonly known as cooking!

Blood cultures should be obtained under strictly aseptic conditions to avoid contaminating the sample. When using a winged collection set, the aerobic bottle should be filled first followed by the anaerobic bottle. This prevents even a small amount of oxygen entering the anaerobic bottle which could prevent really

fastidious anaerobes from replicating. Once taken, culture bottles should be kept at room temperature as refrigeration may destroy bacteria leading to a negative result. Always follow your institutions policy on blood culture sampling.

Timing is also important when obtaining blood cultures. Typically, the temperature spikes about 30 minutes after large numbers of bacteria are released into the blood stream. This is the ideal time to obtain cultures as there is a greater chance of capturing the invading microorganism. Cultures should be obtained before paracetamol is administered or the patient commences antimicrobial therapy.

True Case Examples

When errors do occur it is not always a simple mix up between two patients. When analysing the results it often appears that there are at least three patients in the chain as the examples below show.

Case 1. Biochemistry results showed a raised troponin on a patient admitted to the Emergency Department at St. Anywhere's NHS Trust. This indicated that the patient may have had an M. I. However, the patient whose name was on the results had a sprained ankle and had not had a blood test. Whoever the patient with the M. I. was, they had been sent home untreated. . .

However, it is highly unlikely that a patient with symptoms of an MI would be discharged without a doctor reviewing their blood results and ECG recording. Whose results then did they review?

Case 2. A sample was required for blood transfusion on Patient A who was in a six-bedded dormitory. Through numerous errors, the sample was inadvertently taken from Patient B but labelled with the details for Patient C.

The next and final part looks at why errors occur.

What Safety Devices are Available?



New legislation is on its way that aims to prevent injuries and infections caused by accidents during the use of sharps including needlestick injuries. The companies who manufacture blood collection products offer a wide range of innovative designs where needles are safely retracted or covered to help keep us safe, here are some that are available.



VACUETTE® Premium Safety Needle System with 'passive' activation from Greiner Bio-One



Eclipse™ Signal™ Blood Collection Needle with flashback and integrated Holder from BD Vacutainer®



VACUETTE® Safety Blood Collection Sets with pre-attached holder from Greiner Bio-One



Safety-Lok™ Blood Collection Set from BD Vacutainer®



VACUETTE® Quickshield Complete Plus with flashback and pre-attached holder from Greiner Bio One



Push Button Blood Collection Set from BD Vacutainer®

 BD have a dedicated safety line into their Customer Care team:
Tel: 01865 781699
Email: safety@bd.com and also have a new Safety website www.bd.com/europe/safety.

 greiner bio-one
Greiner Bio-One can be contacted for safety information on 01453 825255 and emailed at safety@uk.gbo.com