An Article from Vein Access Technologies

## If It's Not Palpable, It's Not 'Stickable'

By M. Gail Stotler, Vein Access Technologist / B.S.N., R.N. / Biology / Anatomy / Physiology / Physics / Chemistry / Math

Published by Vein Access Technologies, a division of The Nurses' Station, P.C. #2 Terminal Drive, Suite 1, East Alton, Illinois 62024 618-259-7781 www.veinaccesstechnologies.com

Copyright © 2007. All rights reserved

## If it's not palpable, it's not stickable!

by M. Gail Stotler, B.SN., R.N., Vein Access Technologist

We're talking about the vein. There are many "misses" in vein access. They miss on the blood draw. They miss on the IV. They miss when injecting contrast. They miss with the blood donation. They miss! In 2008, in hospitals alone, there were 174 million vein access failures out of the 263 million ordered.

They try to avoid missing by LOOKING for a vein. They look for blue. They look for black, when using a vein finder tool. They look for a "rope-like" structure. When they can't SEE any of that, they look at an anatomy diagram, and try to use it as a map overlay. None of this works. Or, let's put it this way, it doesn't work very well.

And just because you can SEE a vein, it doesn't mean that the vein is 'stickable'. Have you heard the expression, "You can't judge a book by it's cover."? Well, you can't judge a vein by it's either. Not all veins are created equal. Some veins tolerate the stick and the procedure and some don't – some rupture upon venipuncture, some infiltrate with those infusing fluids. Some aren't 'stickable'.

How will you know? It's not something you can SEE. It is only something that you can FEEL. How do you read something that you cannot SEE? By 'FEEL'. PALPATE!

Palpating for the vein will locate one for you EVERY time. Guaranteed! Palpating that vein will tell you every thing else that you need to know about that vein before you even decide to stick it. What else do we need to know about a vein, besides where it is at?

1. We need to know how thick the wall of that vein is. If is to too thin, it will rupture like an over distended water balloon – you've all seen that before. If the wall is in poor health, varicosed, the same thing will happen. This wall thickness is called FIRMNESS and it can be graded on a scale from 0-10 with 10 being the thickest and firmest. And the rule is, if the wall grades a 5-10 on the firmness scale you, can stick it. If it is less than 5 on the firmness scale, don't stick it, because the wall of the vein is too thin and will rupture like that over distended water balloon. Read the book – How to Locate a Health Vein.

2. We need to know the SIZE of the vein. A larger target is easier to hit, wouldn't you agree? But you also need to think about the diameter size of the lumen of your vein and the diameter size (the gauge) of the needle you are wanting to use. You need to choose a needle size appropriate to the size of the lumen of that vein. (Or, if you consistently use one size needle, then you need to pick a vein that will accommodate that size needle.) Read the book – How to Locate a Healthy Vein.

3. We need to know the DIRECTION the vein is running. You want a lot of vessel to work with. So, if you line your needle up with the direction that the vein is running you will have a lot of vessel to work with. If you don't know the

direction and you insert your needle, you may be approaching it in a bisecting manner (perpendicular to the vein, not in alignment with the vein) and have only a quarter inch, or less, of vessel to work with. And, if you were target shooting, will you be more accurate with your "hit" if you are lined up with your target or if standing off to the side of your target? I hope you said "lined up with"! Read the book – How to Locate a Healthy Vein.

4. We need to know the DEPTH of that vein? Superficial Veins, the ones that sit between the surface of the skin and the surface of the muscle, in the subcutaneous tissue. The veins we always (and only) work with (Superficial Veins, not Deep Veins), are located at three depths within that superficial subcutaneous fat region of the extremity.

5. These depth descriptions are:

a) shallow s. v. - sits very close to the surface and can very easily be felt (palpated), and can be seen (the blue hue).

b) average depth s.v. – sits a little further in from the surface but can still be easily felt (palpated), but you cannot SEE blue; sometimes you can see the "impression" of a vein.

c) deep s.v. – (with a little "d") – sits a little further in yet in that subcutaneous tissue and is not felt (palpated) by gliding, but is palpated ONLY by pressing; you CANNOT SEE blue or the impression of a vein.

These characteristics describe a healthy vein and are critical to the success of picking a vein that will tolerate the needle stick, accommodate the size of needle that you have selected for the job, and tolerate the procedure that you are about to do to it. And you can't SEE these characteristics – they can only be FELT, PALPATED.

## Read the book – *How to Locate a Healthy Vein*.

This is just a fraction of what there is to know about the "healthy" vein. There is so much more to this story. And the rest of the information fills in 'all the blanks'. It is the "missing information" that we all knew had to be out there, hoped would be out there.

With this "missing information" there will be fewer misses – GUARANTEED!

Vein Access Technologies 2 Terminal Drive, Ste. 1 East Alton, IL 62024 618-259-7781

## www.VeinAccessTechnologies.com

Copyright protected: 2006