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PHLEBOTOMY Ps and Qs: *Problems and Quandaries in Specimen Collection*

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- **Phlebotomists Are Important**
- **Members of the Healthcare**
- **Team**



Phlebotomy Challenges

- **Dangerous conditions**
- **Problem patients and unusual patient situations**
- **Risks associated with equipment and collection site**
- **Communication issues**
- **Liabilities that impact patient interactions**





Course Objectives

- 1. Discuss advantages, disadvantages, and challenges associated with the collection of blood specimens from various anatomical sites and in special patient conditions and populations.**
- 2. Identify precautionary measures and actions that promote safe use of phlebotomy equipment.**
- 3. List barriers to effectively communicating with patients.**





Proper Patient Identification

Remember . . .

- **Only identifiers attached to the patient are acceptable**
- **Two identifiers are required**
- **Any discrepancies must be resolved before collecting specimens**



● Problems in Patient Identification

- Patient has no ID band
- ID band not attached to patient
- ID band has incorrect information
- High-risk situations can be problematic
- Impatient healthcare providers
- Other?





By the Numbers

- **Studies support the need for proper patient identification**
- **Challenges persist**
- **A 2010 CAP Q-Tracks study determined an initial ID band error rate of 7.4%**
- **Most common problem – bands were missing**
- **Estimates suggest that more than 160,000 adverse patient events occur each year in this country**
- **Thank goodness, 85% of these mistakes are caught**
- **But, what about the remaining 15%?**





Quandaries in Vein Selection

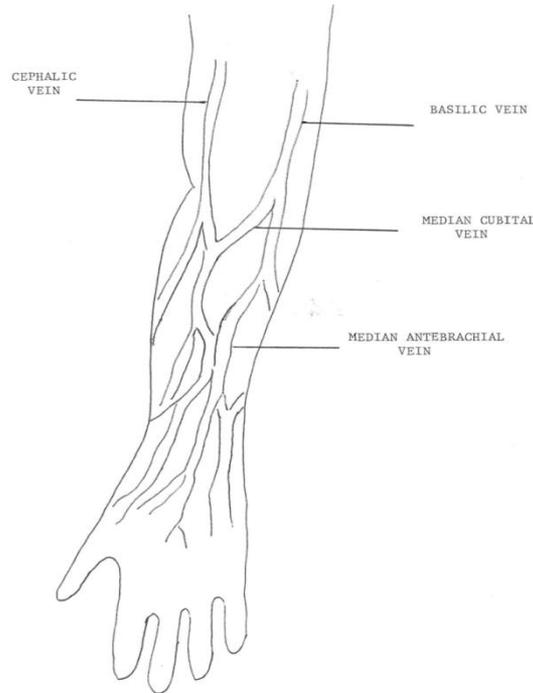
- **The venipuncture is an invasive procedure**
- **Infection is always a possibility**
- **Veins used for other purposes too**



Veins in the Arm

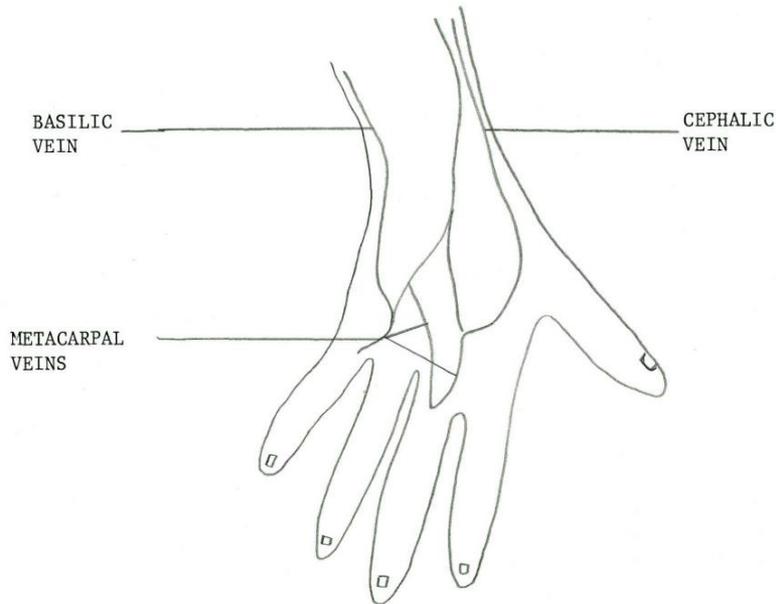
Preferred

Optional

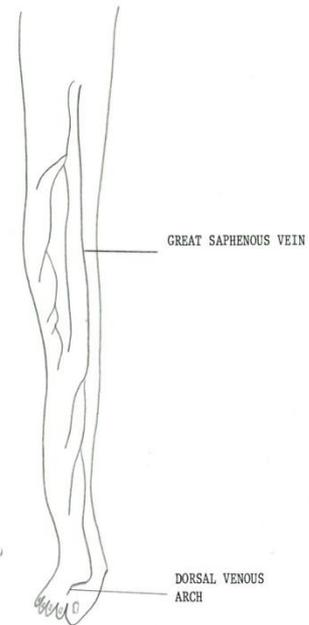


Other

Optional Veins in the Hand



Veins and Areas to Avoid



Venous Viewpoints

If accidentally puncture an artery

- note that arteries feel different
- stop the venipuncture immediately
- remove needle
- apply pressure



Venous Viewpoints

If accidentally puncture a nerve

- **stop the venipuncture immediately**
- **remove needle**
- **repeat if necessary**
- **follow policies for documenting**





Venous Viewpoints

Remember that all patients are unique

- vein location varies from person to person
- don't be afraid to feel for a vein
- feel both arms





Venous Viewpoints

Potential for injury associated with all veins

- **select vein that is most likely to be punctured without injury to patient**



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The Median Cubital is Best



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- **Phlebotomists Encounter**
- **Risks During Venipuncture**
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- **Risks Can be Minimized with Safe**
- **Use of Phlebotomy Equipment**
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- **Gloves are required**
- **Discard after entire procedure completed**
- **Don't cut off tip**
- **Don't wash**



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Safe Use of Phlebotomy Equipment

Needles – a Little History . . .

- Needlestick Safety and Prevention Act
- sharps-injury prevention devices
- commemorative conference held
- rate of accidental needlesticks is down
- safety needles widely used
- non-compliance still a concern



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Safe Use of Phlebotomy Equipment

Why is rate of non-compliance with safety
needles still high?



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Safe Use of Phlebotomy Equipment

How and when do risks occur when using needles in venipuncture procedures?

- removing needle from holder
- contacting back end of needle
- bending/breaking needle
- improper activation of safety device
- recapping needle
- improper needle disposal
- other?



Safe Use of Phlebotomy Equipment

Precautions

- Do not remove needles
- Do not reuse holders
- Never break, manipulate or recap needles
- Use safety devices
- Immediately dispose of holder with needle
- Modify work practices
- Receive training



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Safe Use of Phlebotomy Equipment





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Problem Patients and Unusual Patient Situations

Sometimes, situations warrant extra attention or intervention by the phlebotomist, pose additional risks to the phlebotomist or patient, or generally impact the phlebotomy procedure



• How Should These Patients • and Situations Be Handled?

- Burns
- Casts or dressings
- Breathing stops
- Convulsions
- Mentally disturbed
- Excessive bleeding
- Fainting
- Nausea/vomiting
- Obesity (the bariatric patient)



• How Should These Patients • and Situations Be Handled? • • •

- Tremors
- Arthritis
- Unconscious/unresponsive patient
- Mastectomy
- Agitated/uncooperative patient
- IVs and VADs
- Special requests
- Cancer patients



Cancer Patients

- Veins often difficult to locate
- Veins are hard to access
- Hands and fingers may be cold
- Tendency to bleed
- Swollen hands/arms





Special Patient Populations

The geriatric patient



Special Considerations

Physiological changes occur in geriatric patients

- **Skin loses elasticity, moisture and supportive connective tissue**
 - thin skin allows veins to roll and bruising to occur
- **Muscle tone is lost and muscles may become smaller**
 - angle of needle insertion needs to be more shallow
- **Abnormal drops in temperature may occur**
 - warm blood collection sites





Case Study

A young phlebotomist is assigned to collect blood samples from the psychiatric ward at the hospital where she works. The usual procedure before entering a patient's room is to verify with the nursing staff that all patients on the collection list are stable enough to undergo a phlebotomy procedure. The young phlebotomist is told that all patients are fine on this particular day.





Case Study - Continued

Therefore, she enters the room of a physically large and tall woman. The woman seems receptive and willingly engages in appropriate identification procedures. However, once the phlebotomist actually punctures the vein for blood collection, the patient unexpectedly jerks her arm away and pushes the young phlebotomist so hard she staggers against a wall.





Quiz Question

What is the best course of action for this phlebotomist?

- A. Approach the patient again – that sample must be collected.**
- B. Activate the needle's safety device, since the needle is exposed and dangerous, then exit the room.**
- C. Make sure the patient has stopped bleeding, then exit the room.**
- D. Exit the room immediately.**



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Quiz Discussion





Communication Quandaries





Barriers

- **Language**
 - terms to avoid
 - accommodations may be needed
- **Improper transmission**
 - be aware of how voice is projected
- **Disabilities**
 - hearing impaired
 - visually impaired
 - use open-ended questions



Barriers

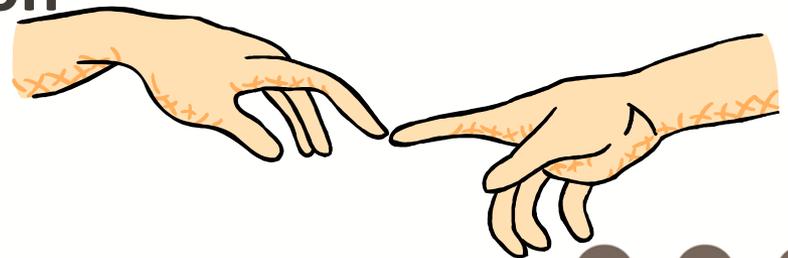
- **Distracting noises**
 - minimize as much as possible
- **Age**
 - use age appropriate vocabulary
- **Tone of voice**
 - be aware of inflection or pitch



Nonverbal Communication

Display positive body language

- Smile
- Use eye contact to build trust
- Face patient to show respect
- Respect comfort zone
- Use gentle, soothing touch when positioning patient for blood collection



Nonverbal Communication

Negative body language

- Nervous behaviors can make patient anxious
- Certain breathing patterns can convey boredom or reluctance
- What are some other actions that distract from a professional image?



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Developing Good Listening Skills

Active listening

- Paraphrase to understand
- Focus on content – what is the meaning
- Maintain eye contact to express interest
- Minimize external distractions
- Questions encourage and reassure the speaker
- Feedback allows for verification and clarification
- Practice is needed





Case Study

A phlebotomy student is dispatched to collect a prothrombin time (PT) from an outpatient. The patient, though unfamiliar to the phlebotomist, states that she has PTs drawn weekly and that a butterfly needle must be used because she has small veins.





Case Study - Continued

The student palpates the vein, but chooses a standard sized, regular needle with a holder. She obtains the specimen without incident. Later that afternoon, the phlebotomist is notified that the PT patient has filed a complaint because the wrong type of needle was used to collect the blood sample.





Quiz Question

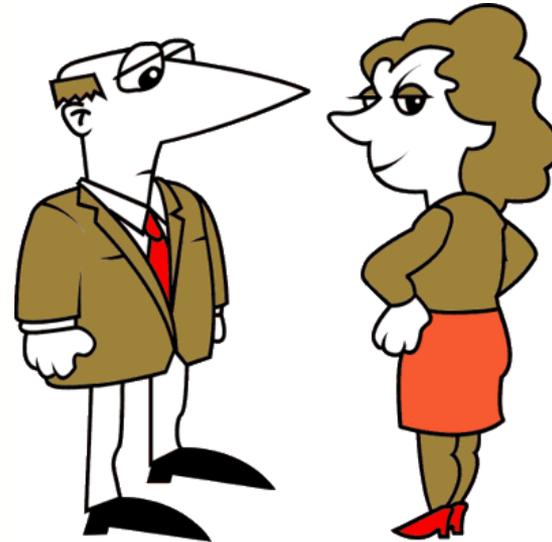
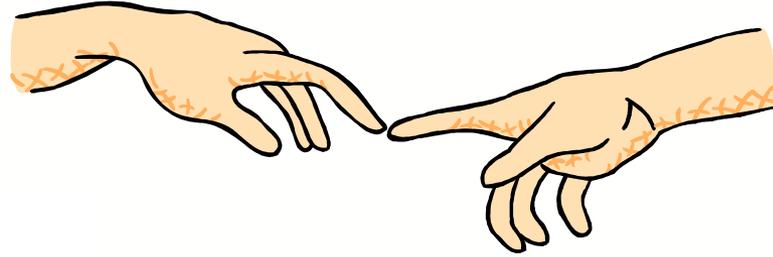
What communication skill did the phlebotomy student forget?

- A. Telling the patient what size needles she was going to use.**
- B. Using a soothing touch.**
- C. Respecting the patient's comfort zone.**
- D. Listening to the patient.**





Quiz Discussion



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Summary/Conclusion

What has been learned today?





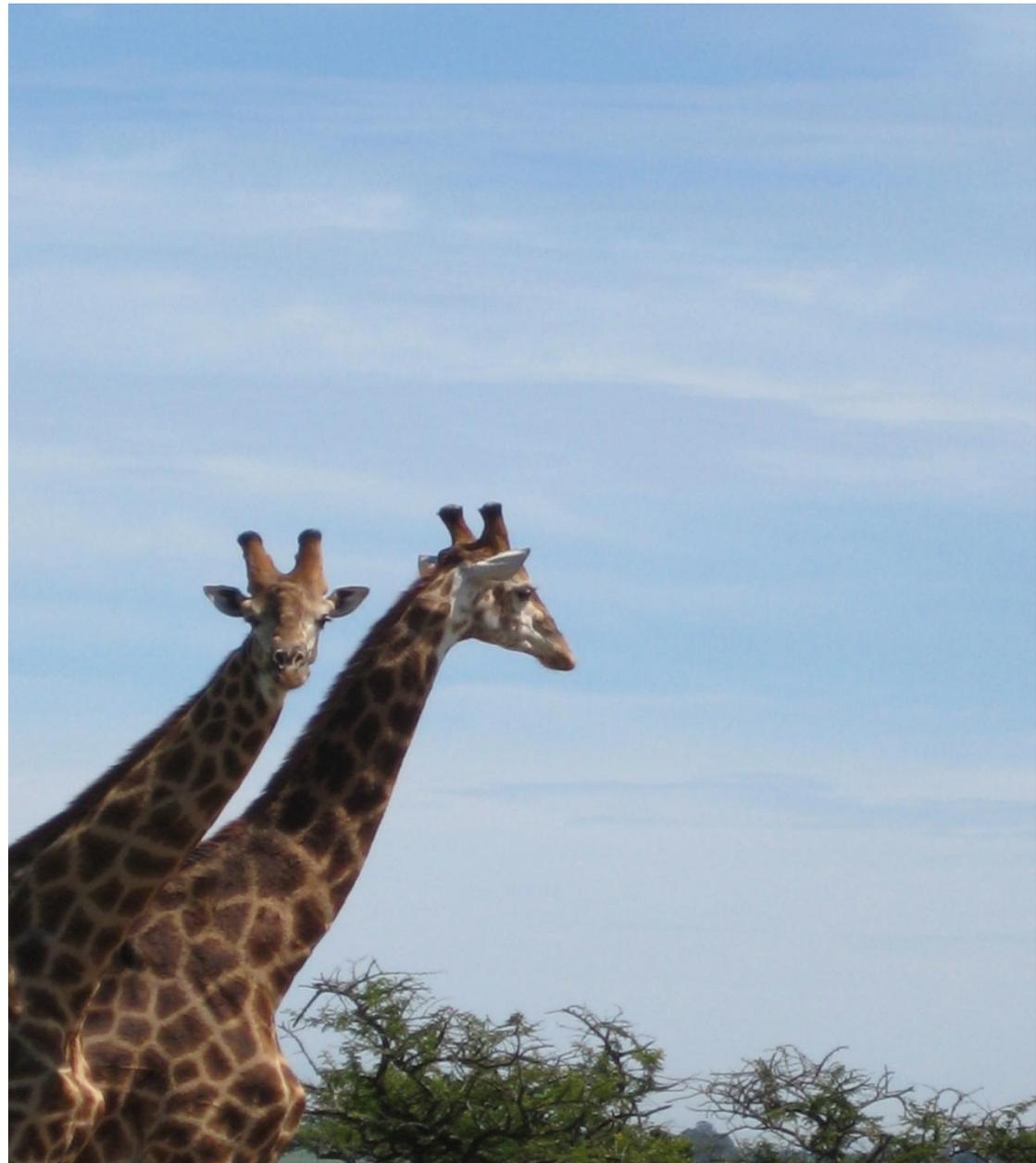
Bibliography and References

1. Center for Phlebotomy Education. *Blood Collection FAQs*. 2008.
2. Clinical and Laboratory Standards Institute. *Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture Approved Standard – Sixth Edition*. H3-A6, 2007.
3. Clinical and Laboratory Standards Institute. *Accuracy in Patient Sample Identification; Approved Guideline*. GP33-A, 2010.
4. Garza, D., Becan-McBride, K. *Phlebotomy Handbook*, 8th Edition, Pearson, 2010.
5. Garza, D., Becan-McBride, K. *Phlebotomy Simplified*, Pearson, 2008.
6. *Phlebotomy Today*. Volume 11, Issue 12. Center for Phlebotomy Education, December 2010.
7. Stankovic, A. *Advances in technology improving safety and efficiency in blood-sample draw*. *Medical Laboratory Observer*, January 2011.





Thank You!





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