

Vein Care

LOOKING AFTER VEINS IN THE BLEEDING DISORDERS COMMUNITY

This brochure provides recommendations with supporting literature from nurses in Hemophilia Treatment Centres (HTCs) across Ontario, Canada who have specialized in the care of patients with inherited bleeding disorders.

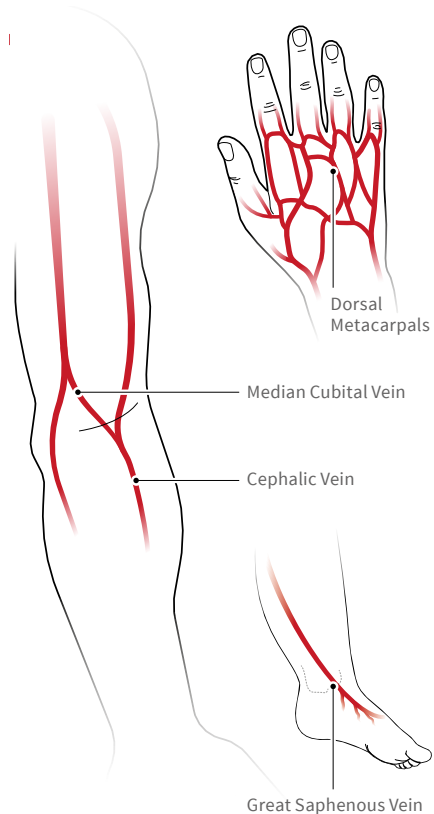
Individuals with a bleeding disorder often require frequent and regular venous access to administer clotting factor concentrates for the prevention of bleeding. Vein care within this population is different from the majority of medical cases requiring venous access.

How to Choose a Vein

The most accessible and convenient sites for venipuncture are typically found in the antecubital fossae, the forearms, and the dorsum of hands.

In infants, the saphenous vein on the medial aspect of the ankle or the foot are a good option.

Please note, with experienced patients and families, the vein which they recommend as their “most reliable” is often truly the best option. Recall that this population has had an inordinate number of needles over their lifetime and so their opinion is truly an informed one and should be thoughtfully considered.



If a vein is difficult to locate or dilation is not optimal:

- Ensure that the individual is well hydrated prior to venous access. Consuming a hot beverage may be helpful.
- Ensure that the individual is warm through clothing or increased light activity immediately prior to infusion.
- Use of a warmed blanket or hot pack applied to venous access sites will promote vein dilation.
- Gently tap the skin over the chosen vein/or gently stroke the vein to improve vasodilation.

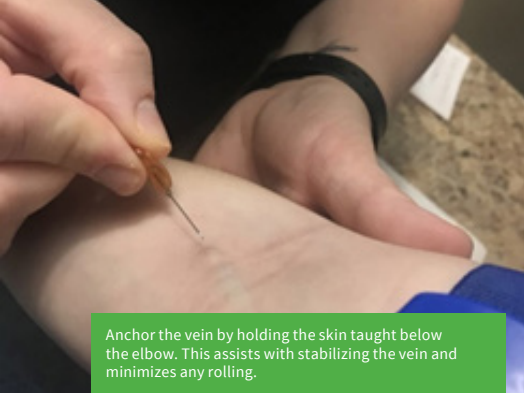
The development of good veins is aided by well-developed supporting muscles. Regular use of a grip exerciser or the repeated squeezing of a rubber ball are simple ways of achieving this.

Tips for Venipuncture in Individuals with a Bleeding Disorder

Individuals with a bleeding disorder receive education and skills training from their HTC nurses regarding vein selection and access using the smallest gauge butterfly infusion set (instead of a peripheral intravenous catheter) to minimize pain and scarring.

DO's

1. **DO** choose the site of venipuncture as a shared decision to provide minimal discomfort for the individual. The person with a bleeding disorder or their caregiver often know which is typically their best/most reliable vein.
2. **DO** seek guidance from the nurse at the individual's HTC if you are unsure of an appropriate site.
3. **DO** aim to reduce fear/anxiety, promote comfort and provide pain relief where possible (e.g. topical local anesthetic for 20 minutes prior to venous access).
4. **DO** cleanse the vein site with chlorhexidine/alcohol swab; note the ridge of the vein may be reflected in the wet surface. **DO** allow the skin cleansing solution to dry or wipe dry with sterile gauze after 60 seconds before puncturing the skin to promote asepsis and prevent pain.
5. **DO** apply the tourniquet 10 to 15 cm above chosen insertion site; you can apply the tourniquet on top of a thin layer of clothing. Apply tight enough to both distend the vein and decrease the pain sensation. Check for presence of radial pulse.
6. **DO** anchor the vein immediately before accessing to prevent the vein from rolling away from the needle upon insertion.
7. **DO** use the butterfly needle supplied with the clotting factor concentrate. **DO** ensure that the bevel of the 25 gauge butterfly infusion set is facing up.
8. Once the infusion is complete, **DO** apply pressure through the gauze after the site has been used for approximately 2-3 minutes to ensure minimal to no bruising.



Disclaimer: Caregiver infusing individual with bleeding disorder. If nurse is performing the procedure then routine precautions should be followed (gloves).

DON'Ts

- 1. DON'T** rush the procedure. Take time to assess the most appropriate vein in consult with the individual or caregiver (consider all options before attempting venous access).
- 2. DON'T** apply tourniquet too tightly to avoid injury or bruising the skin, and don't apply too long as it will flatten the vein and make it challenging to access. **DON'T** forget to release the tourniquet gently BEFORE the infusions begins.
- 3. DON'T** feel the need to rotate venipuncture sites; use the best site for the individual with the bleeding disorder regardless of how many times it has been used (as long as the site is not in suboptimal shape – contact the HTC if you have concerns).
- 4. DON'T** use a peripheral intravenous needle (PIV).
- 5. DON'T** worry if the patient has scarring of tissue over the vein site; this is a result of repeated access and normal integument healing. Individuals' with a bleeding disorder may call this scarring their 'tunnel'. Venipuncture through this type of well-used skin may initially feel tougher so utilize the appropriate amount of force until you gently break through. The formation of the scar/tunnel makes venous access less painful.

Examples of skin scarring from repeated use



Key Takeaway Messages for Vein Care in Individuals with Bleeding Disorders

1. Always ask the individual with a bleeding disorder or their caregiver which site is their best site for venous access.
2. No need to rotate venous sites. Factor concentrates DO NOT harm the blood vessel lining and using the same site will cause a tunnel/scarring to form making the needle insertion less painful.
3. Only use butterfly infusion sets, NO PIVs.
4. Any questions or concerns, contact the individual with a bleeding disorder's HTC as noted below.

Hemophilia Treatment Centre	Contact Name and Phone Number



Canadian Association of
Nurses in Hemophilia Care
Association canadienne des
infirmières et infirmiers en hémophilie

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References:

1. Jones P. (2003). Looking after the vein. World Federation of Hemophilia. <http://www1.wfh.org/publications/files/pdf-1174.pdf>
2. Shoemark R, Starosta H. (2018). Looking after your veins. Haemophilia Foundation Australia <https://www.haemophilia.org.au/publications/national-haemophilia/2018/no-202-june-2018/looking-after-your-veins>
3. Black K, Pusie MV, Harmidy D, & McGillivray D. (2005). Pediatric intravenous insertion in the emergency department: bevel up or bevel down? *Pediatric Emergency Care*, 21, 707-711.
4. Dougherty L. (2008). Peripheral Cannulation. *Nursing Standard*, 22, 52, 49-56.
5. Kuensting L, DeBoer S, Holleran R, Shultz B, Steinmann R, & Venella J. (2009). Difficult Venous Access in Children: Taking Control. *Journal of Emergency Nursing*, 35 (5), 419-423.
6. Perry A, Potter P, Ostendorf W, Cobbett S. *Vascular Access and Infusion Therapy*. Canadian Clinical Nursing Skills and Techniques. Mosby Canada, 2019:748
7. The Canadian Hemophilia Society. <https://www.hemophilia.ca/find-a-treatment-centre-near-you/>