



Testing of and Referral for Bleeding Disorders

A RESOURCE FOR PRIMARY CARE PEDIATRICIANS

Initial patient history:

- Patient is concerned about bleeding or has unexplained anemia
- Family history of bleeding disorder or bleeding
- Abnormal lab test already obtained

NO

YES

Screening questions:

Have you or family member needed medical care for bleeding problem

- during or after surgery or trauma?
- with dental procedures/extractions?
- during childbirth or in regard to heavy menses?
- have easy bruising or bruises that are raised or lumpy?

NO

YES

No further evaluation needed

Further Screening Questions:

1. Do you have a blood relative who has a bleeding disorder such as von Willebrand disease or hemophilia?
2. Have you ever had prolonged bleeding from small wounds lasting >15 minutes or recurring in the 7 days after the injury?
3. Have you ever had heavy or prolonged bleeding after surgical procedures such as tonsillectomy?
4. Have you had bruising with minimal or no trauma, especially with a lump under the bruise?
5. Have you ever had a spontaneous nosebleed (without trauma) that required more than **10 minutes** to stop or needed medical attention?
6. Have you ever had heavy, prolonged or recurrent bleeding after dental extractions requiring medical attention?
7. Have you ever had blood with a bowel movement unrelated to constipation?
8. Have you ever had anemia requiring medical treatment or blood transfusion?
9. For women, have you had heavy menses (clots greater than 1 inch in diameter or changing pad/tampon more than hourly)?

If answer is YES to any of the above questions continue on to next section for recommended testing and referral. Any patient who has unexplained bleeding or who you are concerned about may still need hematology referral

Recommended labs for evaluation:

CBC

INR/PT

PTT

Initial von Willebrand assays: vWF:Ag, vWF:RCo, FVIII

ABO/Rh

*If ordering through a Lifespan lab you can order “von Willebrand screen” which includes: ristocetin cofactor, collagen binding assay, vWF:Ag, Factor VIII, PT, PTT, ABO (ABO group only)

*Multimers and other tests that help with determining which type of vW disorder a patient has should be left to the hematology clinic

Interpretation of lab results:

Lab results ALWAYS warranting further evaluation by pediatric hematologist:

- LOW vWF:Ag (<50)
- LOW vWF:Rco (<40)
- LOW Factor VIII (<50)
- thrombocytopenia
- anemia
- prolonged PTT or INR

Abnormal values that likely do not require further evaluation:

- Elevated vWF antigen
- Elevated Factor VIII
- Elevated platelets
- Elevated vWF:Rco
- Shortened PTT

Additional considerations:

- ABO Blood type: Individuals with type O blood will have vWF factor levels 25-35% below non-type O blood patients so may have “low vWF” that is not clinically significant
- vWF is an acute phase reactant so if measured during times of stress, illness, increased estrogen the value may be elevated. May consider looking at inflammatory markers at time of vWF evaluation to help interpret.

If lab evaluation is normal and concern for bleeding continues ask a family to keep a bleeding log for 6 months and re-evaluate at that time the need for further work up

Have a question or want to make a referral?

Call Hasbro Children’s Hospital operator at 401-444-4000 and ask for hematology fellow on call