

## VON WILLEBRAND DISEASE

Von Willebrand disease (VWD) is an inherited bleeding disorder. It affects your blood's ability to clot. If your blood doesn't clot, you can have heavy, hard-to-stop bleeding after an injury. The bleeding can damage your internal organs or even be life threatening, although this is rare.

In VWD, you either have low levels of a certain protein in your blood, or the protein doesn't work the way it should. The protein is called von Willebrand factor, and it helps the blood clot.

Normally, when one of your blood vessels is injured, you start to bleed. Small blood cells called platelets clump together to plug the hole in the blood vessel and stop the bleeding. Von Willebrand factor acts like glue to help the platelets stick together and form a blood clot.

The signs and symptoms of VWD depend on the type and severity of the disease. Many people have such mild symptoms that they don't know they have the disorder. If you have type 1 or type 2 VWD, you may have the following mild-to-moderate bleeding symptoms:

- Frequent large bruises from minor bumps or injuries
- Extended bleeding from the gums after a dental procedure
- Heavy bleeding after a cut or other accident
- Frequent or hard to stop nosebleeds
- Blood in your urine from bleeding in your kidneys or bladder
- Blood in your stools from bleeding in your intestines or stomach

People with type 3 VWD may have all of the symptoms listed above, as well as severe bleeding episodes for no reason. These bleeding episodes can be life threatening if not treated right away. They also may have bleeding into soft tissues or joints, causing severe pain and swelling.

Women are especially impacted by VWD because of the relationship of this disease to reproductive issues. These problems include heavy menstrual bleeding (termed *menorrhagia*), bleeding and clotting complications of pregnancy, and recurrent fetal loss.

Menorrhagia can be incapacitating for some women and may suggest a bleeding disorder. Current research supports the hypothesis that a significant number of cases of unexplained menorrhagia may be due to an underlying bleeding disorder. Other symptoms of a bleeding disorder might include unusually hard-to-control bleeding after minor injury, childbirth, or surgery; excessive bleeding from the gums after flossing, brushing, or having a tooth removed; frequent or long nosebleeds; and easy bruising.

The American College of Obstetricians and Gynecologists has made recommendations to screen women with menorrhagia for VWD.\* Women who should be tested include

- adolescents with severe menorrhagia (they should be tested before hormone therapy is prescribed)
- adult women with significant menorrhagia that cannot be explained by other causes
- women who are about to have hysterectomies for excessive menstrual bleeding

Treatments for VWD include therapies to replace or increase the amount of von Willebrand factor in your blood, prevent the breakdown of clots, and control heavy menstrual bleeding.

VWD can't be cured, but it can be treated. With the right treatment, people who have VWD can lead normal, active lives.