

## BLEEDING DISORDERS

### **Bleeding Disorders**

The blood does not clot normally. A person with a bleeding disorder does not bleed more profusely or more quickly than other people. However, bleeding may occur for a longer time.

### **Types of Bleeding Disorders**

#### Hemophilia

- *Hemophilia A* lacks Factor VIII clotting protein and is the most common form of hemophilia
- *Hemophilia B* lacks Factor IX clotting protein
- Three levels of severity including mild, moderate and severe

#### Von Willebrand Disease (VWD)

- Lacks the Von Willebrand clotting factor
- *Type 1* is the most common form of VWD. Symptoms are usually mild.
- *Type 2* has several subtypes. Symptoms are moderate.
- *Type 3* is very rare and the most serious type of VWD. There is very little Von Willebrand Factor so bleeding can happen often and if untreated, can be serious.

#### Idiopathic Thrombocytopenic Purpura (ITP)

ITP is a disorder of the blood that involves the immune system. Platelets control and stop bleeding by causing blood to clot. With ITP, a specific type of antibody is produced which coats the platelets and causes them to be destroyed. This can result in bleeding into the skin, mouth, nose and occasionally internally.

### **Causes**

Hemophilia and VWD are usually inherited, meaning it is passed on through a parent's genes.

The cause of ITP is unknown. It can occur after a cold or viral illness, mumps, measles or chicken pox. It can also happen after taking some medications. The majority of ITP cases in children are temporary.

### **Treatment**

There is no cure for inherited bleeding disorders. The basic treatment is to stop or prevent bleeding.

Medical treatment is not always necessary for bleeds such as minor cuts, bruises or

nose bleeds. However, bleeding into a joint or a muscle is never minor and treatment is essential. The type of treatment depends in part on the type of bleeding disorder.

### **Precautions**

A child with hemophilia should be encouraged to participate in physical activities that will keep his/her muscles and joints strong. Many people with mild forms of a bleeding disorder can participate in all kinds of sports including active sports like soccer and high-risk sports like skiing. People with more severe forms of a bleeding disorder may find these activities lead to serious bleeding and high-risk activities are strongly discouraged.

It is recommended to talk to the parent/guardian if a child wants to participate in higher risk activities such as football, wrestling, ice hockey, full contact soccer or lacrosse, downhill skiing, boxing or rugby.

Do not give aspirin, non-steroidal anti-inflammatory drugs or blood thinners to a child with a bleeding disorder.

### **External Bleeds**

#### Surface cuts

1. Put on protective gloves.
2. Clean skin.
3. Apply firm continuous pressure until bleeding stops.
4. Apply a band-aid or dressing.
5. Encourage ice.

#### Nose bleeds

1. Put on protective gloves.
2. Encourage the child to gently blow his/her nose to remove mucous and unstable clots. Once bleeding has stopped, encourage the child to NOT blow his/her nose again for as long as possible (at least 1-2 hours)
3. Position the child sitting with head slightly forward.
4. Apply firm continuous pressure for a minimum of 10 minutes or until bleeding stops. Use a cold cloth if possible.

Mouth bleeds

1. Put on protective gloves.
2. Apply firm continuous pressure ( when applicable) until bleeding stops. Use a cold cloth if possible.
3. Encourage popsicles or ice.

For all external bleeds (surface cut, nose, mouth)

1. Call parent/guardian if bleeding does not stop after 20 minutes.
2. If unable to reach parent/guardian or emergency contact, call 911/EMS.
3. Provide medical personnel with copy of FactorFirst card, if available.

Bruising

Children with hemophilia often have bruises on their extremities. These usually are superficial and generally are not cause for alarm. Notify parent/guardian if a bruise is increasing in size. It may be helpful to mark the outline of the bruised area with a pen.

Joint and muscle bleeds

The joints that most commonly bleed are ankles, knees and elbows. Repeated bleeding into a joint causes the lining to swell and bleed easily. The cartilage that covers the ends of the bones can also be damaged. Permanent damage to joints affects the way a person sits, stands and walks.

Muscle bleeds can occur anywhere in the body. After repeated bleeds, muscles can become weak, scarred and shorter than normal. As a result, the joints attached to these muscles cannot move properly. Permanent damage to muscles can also affect the way a person sits, stands and walks.

Signs of a bleed in the joint or muscle may include:

- feels tingly or warm;
  - swelling;
  - pain; and/or
  - stiffness.
1. Have the child rest. Keep the child still to avoid further injury.
  2. Apply ice to injury. Do not leave it longer than 20 minutes and keep a cloth layer between ice and bare skin.
  3. Elevate the injury body part.
  4. Contact parent/guardian. If unable to contact parent/guardian or emergency contact after 15 minutes, call 911/EMS.

5. Provide medical personnel with copy of FactorFirst card, if available.

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**Internal Bleeds**

Bleeding into the head, eye, neck, chest or abdomen may be life-threatening and requires immediate medical attention.

Head injury

- loss of consciousness
- drowsiness
- dizziness
- irritable
- confused
- nausea and/or vomiting
- dilated or unequal pupils
- headache
- unsteady gait

Injury to eye and/or surrounding area

- pain
- swelling

Neck injury

- pain in neck or throat
- swelling
- difficulty swallowing
- difficulty breathing.

Chest injury

- pain in chest
- difficulty breathing
- coughing up blood
- pale skin
- lack of energy

Abdominal injury

- pain in abdomen or lower back
- nausea or vomiting
- blood in urine
- black or bloody stool

If a child has a significant injury to the head, eye, neck, chest, abdomen or eye, with or without showing signs:

1. Call 911/EMS.
2. Do not move the child to prevent further injury, unless child is in an unsafe place.
3. Notify parent/guardian.
4. Provide medical personnel with copy of FactorFirst card, if available.