Blood Sampling in Children
(Venipuncture or Heel Stick)

There are times when children need to have blood tests done as part of routine health care or due to illness. In most cases, blood is obtained by inserting a needle into a vein (a blood vessel) and drawing a blood sample into a special tube or into a syringe.

In newborns, blood may be obtained by making a tiny puncture on a specific area of the heel (called a "heel stick"). This is usually done by using a tiny needle called a "lancet". Drops of blood are then collected in small tubes which are sent to the lab. This same method can be used for infants and older children to obtain small amounts of bloods from the fingers. When larger amounts of blood are needed from newborn babies, the veins on the arms, hands, tops of feet, on the scalp, and on the neck might also be used to obtain blood samples.

BEFORE THE PROCEDURE

Warming devices may be used to help increase the blood supply in the vein or in the area of the heel where the blood will be obtained. This may make it easier to obtain the blood.

In infants, toddlers, and young children, it is usually necessary to do something to hold the child very still. Parents may be asked to both hold the child still and help comfort the child at the same time. Restraining the child tightly may seem cruel, but it actually makes it quicker, easier, and safer to obtain the blood.

Before inserting the needle, the skin over the vein or the heel is cleansed with alcohol or another antiseptic solution. The skin over the vein may be covered with an anesthetic cream to reduce pain when the needle is passed through the skin.

Distraction of the child through reading, talking, singing, or playing may help to make the procedure quicker and more comfortable for the child.

LET YOUR CAREGIVER KNOW ABOUT:

- Allergies
- History of severe bleeding problems
- Previous reaction to numbing agents, such as Novocaine
- Current medications, including medications on the skin, in the eyes or mouth

RISKS & COMPLICATIONS OF THE PROCEDURE

Most needle sticks to draw blood are quick, relatively painless, and without side effects or complications. However, as with any procedure, there are always possible risks. They include:

- Pain.
- Inability to locate the vein and/or obtain blood.
- Bleeding from the site after the needle is removed.
- Bruising at the site.
- Allergic reaction to numbing medicine used before the needle is inserted.

AFTER THE PROCEDURE

After the blood is obtained and the needle removed, a clean gauze pad is held over the site and pressure is applied to stop bleeding and minimize swelling. The gauze is then either taped in place or replaced with an adhesive bandage.

HOME CARE INSTRUCTIONS

- Keep the bandage in place for 2-3 hours before removal. Heavy activity at the puncture site (such as

throwing a ball or playing on a jungle gym) should be avoided during this time if an arm vein was used.

- After 2-3 hours, the gauze may be removed and discarded. If there is any oozing of blood cover the site with a clean bandage strip.
- Generally, pain only occurs while the needle is in place, but after removal, the pain goes away quickly. Only take over-the-counter or prescription medicines for pain, discomfort, or fever as directed by your caregiver.
- Showering may be done normally after the gauze is removed. If bleeding recurs while showering, the site should be dabbed dry (avoid rubbing the area) and an adhesive bandage applied.

SEEK MEDICAL CARE IF:

- A large bruise at the site of needle insertion.
- The site continues to ooze blood after several hours.
- A rash develops around the needle site.
- Fever develops.

SEEK IMMEDIATE MEDICAL CARE IF:

- Bleeding from the site develops and will not stop even after applying firm pressure to the site for 10 minutes.
- Red streaking or tenderness develops above and/or below the site.
- There is loss of sensation and/or weakness in the arm or the leg where the needle had been placed.
- There is intense pain in the arm or leg where the needle had been placed.

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