Percutaneous Pinning

Percutaneous pinning is a way to support unstable fractures (breaks). “Percutaneous” means “through the skin.” When the patient is asleep, a surgeon will reduce (set) the fracture. The doctor will insert pins to hold the fracture in position until the bone is healed.

The number of pins depends on the fracture location and severity. Occasionally a small incision (cut) is needed to help with pinning. The pins or wires are positioned across the fracture (Pictures 1 and 2).

Before the Surgery

This surgery is often done in an out-patient surgery location unless your child has been admitted to the hospital. The child may not have any food or liquids (including mints, candy or gum) after midnight the previous night. You will get a call the day or evening before surgery to tell you what time to come and give you directions. It is important that you come on time.
Before the Surgery, continued

Some patients are admitted to the hospital the night before surgery because the fracture is too unstable. Once the surgery is completed, they will return to the hospital unit. The child will often be discharged the day of surgery. You will be given thorough instructions.

After the Surgery

Your child will most likely have a splint, cast or bandage after surgery. It is very important that these remain in place and not be removed at any time. It is also very important that the splint, cast or bandage remain completely dry. This will help prevent skin issues or infection at the pin sites.

Your child should elevate the arm above the level of the heart with the hand higher than the elbow. If the fingers are not the injured part, your child will be asked to wiggle the fingers often.

You may put an ice bag over the splint or cast at the area of injury for 1 to 2 days several times a day for 20 minute intervals. You must be careful not to allow the ice to leak, causing the area to become wet. You will be sent home with one or more ice bags.

All activities should be limited until the medical practitioner clears the child to return to play and sports. The child may have a “collar and cuff” or sling for several weeks. You will get information about this at the time of discharge. It is important that this be worn as instructed. (See Helping Hand HH- IV-147, Collar and Cuff.)

Follow-up at the Clinic

Usually a child will need to return for a follow-up about 1 week after surgery. Often a Nurse Practitioner or Physician Assistant will examine the splint, cast or bandage. Your child will have x-rays to check the position of the fracture and pins.

After the first visit, your child will return in 2 to 4 weeks to have the splint, cast or bandages removed. The medical staff will examine the pin site again, and repeat x-rays. If the bone is healed enough, they will remove the pins in the clinic. If there is not enough healing, they will put on a splint or cast for another 1 to 2 weeks.

Pin Removal

You may give your child ibuprofen (Motrin®) or acetaminophen (Tylenol®) before returning to the clinic for pin removal. Parents may hold their child’s hand during the procedure.

An orthopedic tech or nurse will come in the room to help. Any remaining bandages will be removed. A special tool is used to remove the pins as gently as possible. There may be a tiny bit of blood. The staff will apply a bandage and hold pressure. Once all the pins are removed, the staff will apply a bandage and wrap. Your child will get another splint or cast if needed.
**At Home after the Pin Removal**

If there is a splint, it may be removable. If it is, follow the staff’s instructions.

If there is no splint, leave the bandage on for 24 to 48 hours. After that time, the bandage may be removed. The child may then have a bath. Wash the area with soap and water unless you notice any drainage. If there is drainage, call the orthopedic clinic to get instructions. Gently dry the area and apply a large bandage or sterile dressing. Do not apply ointments, creams or lotions to the area until the pin sites are completely healed.

If instructed by staff, the child should begin moving the joint as soon as possible. You may receive a sheet of exercises when your child is cleared for this kind of activity. These exercises will help with stiffness and allow the joint to return to normal function. If there is soreness, giving ibuprofen (Motrin®) or acetaminophen (Tylenol®) may help.

Some children may have one more return visit. They often do not need x-rays, but do need a “range of motion” check. This is to see how well the joint is moving. Children rarely need formal therapy. If it is needed, the staff will discuss that with you.

**When to Call the Doctor**

Contact the orthopedic clinic if:

- there is redness, swelling, pus or drainage at the pin sites
- there is numbness or tingling
- your child cannot move the fingers
- your child has continuous pain or an increase in pain
- your child has a fever:
  - temperature higher than 100 degrees Fahrenheit taken in the mouth (oral)
  - temperature higher than 100.4 degrees Fahrenheit taken in the ear or rectum
  - temperature higher than 99 degrees Fahrenheit taken in the armpit (axillary)

**Clinic contact information:**

- Clinic hours are Monday through Friday, 8:00 am to 4:30 pm. Phone number is (614) 722-5175. Ask for the nurse to discuss any symptoms.

Be sure to contact the clinic if you cannot keep any follow-up appointments.