



BONE FRACTURE



BASIC INFORMATION

DESCRIPTION

A break in a bone, often caused by a fall. Several different types of fractures exist, the divisions depending on the severity. A complete fracture means the bone is broken all the way through. An incomplete fracture means the bone is cracked. An open, or compound, fracture means the fractured bone sticks out through the skin.

FREQUENT SIGNS AND SYMPTOMS

- Pain, swelling, or tenderness near the fracture site.
- Paleness and deformity (sometimes).
- Bleeding or bruising at the site.
- Weakness and unable to bear weight.
- Numbness, tingling, or paralysis below the fracture (rare; this is an emergency).

CAUSES

Injury.

RISK INCREASES WITH

- Activities that carry the risk of injury.
- Reckless behavior that increases the chance of an accident.
- Age. Older adults have bones that are more fragile, and tend to have more falls.
- Osteoporosis and osteopenia.
- Tumors of the bone or bone marrow.

PREVENTIVE MEASURES

- Don't drink alcohol or use mind-altering drugs and drive.
- Use your seat belt in cars.
- Wear protective gear when participating in sports.
- If you have osteoporosis, adhere to your treatment program and avoid situations in which injury is likely.
- Maintain a safe home to prevent falls. No slippery rugs, slick floors, or loose stair railings. Provide mats in bathtubs.

EXPECTED OUTCOMES

- Usually curable with treatment.
- Healing time varies. Recovery is complete when there is no bone motion at the fracture site, and x-rays show complete healing.

POSSIBLE COMPLICATIONS

- Failure to heal (non-union).
- Shock from blood loss.
- Travel of a fat embolus (clump of fat cells) from the injury site to the lungs or brain.
- Obstruction of nearby arteries.



DIAGNOSIS & TREATMENT

GENERAL MEASURES

- Call 911 for help. Give first-aid treatment for bleeding, cover any open wounds, and move the patient as little as possible. Try to immobilize the area. Don't try to set the bone. Arrange for transport to a hospital or emergency room.
- Your health care provider will do a physical exam of the injured area. X-rays will be done to confirm the bone fracture. In some cases, other tests are needed.
- Bone ends that have been displaced are maneuvered back into place (reduction).
- Most fractures require casts, splints, or a special brace for healing. You may need crutches or other aids to walk.
- Treatment in a hospital may be needed for severe fractures.
- Surgery, if the fracture must be repaired with rods, plates, or screws.
- Physical therapy to help in restoring full functionality to the injured area.

MEDICATIONS

Pain relievers and muscle relaxants, if needed.

ACTIVITY

- Immobility of a bone for a long period of time can cause loss of muscle mass, stiffness in nearby joints, and edema (excess fluid in the tissues). It is important to begin to use the affected part as soon as is safely possible.
- Physical therapy may be prescribed to maintain flexibility of the joint and provide strength to the muscles.
- Resume normal activities as soon as symptoms improve and your health care provider advises you to.

DIET

No special diet. Take vitamin C and zinc supplements to promote bone healing.



NOTIFY OUR OFFICE IF

- You have symptoms of a bone fracture.
- The following occur after treatment:

Swelling above or below the fracture site.

Severe, persistent pain.

Blue or gray skin below fracture site (such as in the fingernails), or numbness or loss of feeling below the fracture site.

- New, unexplained symptoms develop. Drugs used in treatment may produce side effects.

Report any of the above signs immediately!

