

Bone Infections

CHAPTER 19

Osteomyelitis

Bone *infections* are mostly a medical problem. Therefore we do not describe all of the many types of bone infections or details of medical and surgical treatment.

Chronic (long-lasting) bone infections are fairly common in villages where persons go barefoot and where injuries and illnesses that can lead to bone infections are frequent. They can be caused by fungus, or by many different kinds of bacteria (including typhoid, tuberculosis, and staphylococcus). Often these infections last for years, causing bone destruction and severe disability.

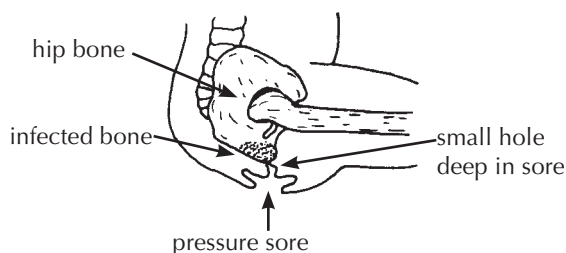
Bone infections are a very common complication of injuries, burns, and pressure sores in persons who have no feeling in their hands and feet. This includes persons with **spina bifida** (see p. 173), **spinal cord injury** (p. 196), and **leprosy** (p. 222). Because the person does not feel pain, often she does not rest, clean, or protect the injured area. As a result, it becomes infected. Gradually the infection gets deeper until it reaches the bone.

THROUGH PROPER EARLY CARE OF SORES AND INJURIES, BONE INFECTIONS CAN USUALLY BE PREVENTED.

The loss of parts of the body sometimes seen in a person who has leprosy (Hansen's disease) is not caused by the leprosy germs. It is caused by other germs, which infect the bone because of injuries the person gets that are not cared for because they do not hurt.

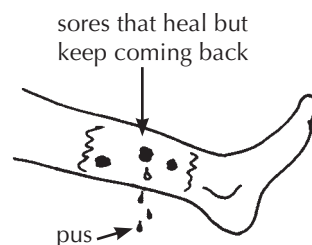


WARNING: Deep pressure sores that do not heal, even after they are kept clean and no weight or pressure has been put on them for months, may have a bone infection. Bone infection is especially likely if the sore reaches the bone, or if a small hole at the bottom of the sore refuses to close and drains liquid or pus. **If you think there might be a bone infection, get medical help if possible and go through all the steps to treat it adequately.**



Signs of chronic bone infection

- The skin near a bone has small, deep sores that heal and then open again to drain pus. Gradually the affected area gets bigger and new holes open.
- There may or may not be pain.
- The pus may or may not smell bad.
- Usually there is no fever—except sometimes at first or at times when the infection gets into the blood.
- Often the infection will get better with *antibiotics*, but keeps coming back.
- The affected bone may gradually become thicker as it is destroyed inside and forms a new bony covering.



Treatment

- Whenever possible get experienced medical help.
- If treated early with antibiotics such as penicillin or vancomycin in the right dosage, sometimes the infection will go away and not come back. If possible, a sample of the pus should be studied (cultured) by a medical laboratory to find out what kind of infection it is and what medicine is likely to work best. Usually the medicine must be given in the vein for a long time (months).
- If you cannot get the pus cultured, you might try treating the infection with penicillin V or dicloxacillin. Use relatively high doses. For dosage and precautions, see *Where There Is No Doctor*. Also seek medical help.
- Surgery may be needed to remove the dead, infected bone.
- Sometimes amputation is necessary (see p. 227).
- Even with excellent treatment, after months or years without problems, new sores may open and again begin to drain from the infected bone.

Rehabilitation and aids

What kind of *rehabilitation* or *orthopedic* aids may be needed will depend on the amount of destruction that has occurred. Sometimes surgery cannot be obtained or the person may prefer to live with the problem rather than with an amputated limb.

For prevention, rehabilitation, and aids, see Chapters 24, 26, and 58 on pressure sores, leprosy, and braces.

When there has been a lot of bone destruction, sometimes a brace can help make walking easier.



Large hole down to the bone in the foot of a woman with a bone infection (osteomyelitis). She has had this problem since childhood 30 years before.

WARNING: The pus from the infected bone may cause serious infections in other persons. Wash hands often. Wear gloves when handling anything with blood or body fluids on it. **Take great care with hygiene.**

Change bandages regularly. **Try to burn or bury used bandages.** Before burying bandages, put them in 2 plastic bags or wrap them in enough newspaper to stop any leaks.



If bandages are to be reused, soak them in cold water with a little bleach and then boil them before using them again. Mix just enough bleach solution for 1 day. Do not use it again the next day. It will not be strong enough to kill germs anymore.