Septic Arthritis:

- Septic arthritis is infection of one or more joints by microorganisms. Septic arthritis can be caused by bacteria, viruses, and fungi. The most common causes of septic arthritis are bacteria, including *Staphylococcus aureus* and *Haemophilus influenzae*. In certain "high-risk" individuals, other bacteria may cause septic arthritis, such as *E. coli* and *Pseudomonas spp.* in intravenous drug abusers and the elderly, *Neisseria gonorrhoeae* in sexually active young adults, and *Salmonella spp.* in young children or in people with sickle cell disease. Risks for the development of septic arthritis include taking immune-suppression medicines, intravenous drug abuse, past joint disease, injury or surgery, and underlying medical illnesses, including diabetes, alcoholism, sickle cell disease, rheumatic diseases, and immune deficiency disorders. Symptoms of septic arthritis include:
  - fever,
  - chills, as well as
  - joint pain,
  - swelling,
  - redness,
  - stiffness, and
  - warmth.

Septic arthritis is diagnosed by X-ray studies of the joint can be helpful to detect injury of bone adjacent to the joint. MRI scanning is very sensitive in evaluating joint destruction. Blood tests are frequently used to detect and monitor inflammation. These tests include the white blood cell count, sedimentation rate, and C-reactive protein. Analysis of infected joint fluid, a procedure called arthrocentesis is commonly used to make an accurate diagnosis of septic arthritis. This procedure involves a surgical puncture of the joint to draw a sample of the joint fluid, known as synovial fluid. Normally, this fluid is sterile and acts as a lubricant. Septic arthritis treatments include using a combination of powerful antibiotics as well as draining the infected synovial fluid from the joint. It's likely that antibiotics will be administered immediately to avoid the spread of the infection. Intravenous (IV) antibiotics are given, usually requiring admission to the hospital for initial treatment. The treatment, however, may be continued on an outpatient basis at home with the assistance of a home health nursing service. Initially, empiric antibiotics are
chosen to cover a wide range of infections. If the bacteria can be identified, antibiotics specific to that organism are used. It may take four to six weeks of treatment with antibiotics to ensure complete eradication of the infection. Drainage of the infected area is critical for rapid clearing of the infection. Drainage is performed by removing the fluid with a needle and syringe. Often the draining occurs daily or with multiple surgical procedures. The exact method depends on the location of the joint. Using arthroscopy, your doctor can irrigate the joint and remove the infected tissue. If drainage cannot be accomplished with joint aspirations or arthroscopy, open joint surgery is often necessary to drain the joint. If the fluid buildup is significant, the drains are left in place to remove excess fluid that may build up after the surgery.