HOSPITAL STAY / POST-OP RECOVERY (CONTINUE)

They will work closely with the surgeon and members of the case management team to coordinate post-hospital treatment plan and the appropriate timetable for follow up.

☐ **Intravenous Antibiotic Therapy**
The most commonly used access to administer a 4 to 6 week antibiotic therapy is through a Peripheral Inserted Central Catheter (PICC) line. The PICC line is inserted via one of the veins in the arm into a larger more central vein, allowing for safer administration of antibiotics over the intravenous period of antibiotic treatment. Patients often are able to self-administer antibiotics through the PICC line at home. This PICC line also prevents the need for repeated IV insertions and the associated pain.

PHYSICAL AND OCCUPATIONAL THERAPY

The rehabilitation team will follow the surgeon's request and tailor your program based upon your specific needs. There are many possible variations and modifications that will need to be addressed and customized and your surgeon and the physical therapy team will review these with you. Some topics include:

- Walking aids (walker, crutches or cane)
- Weight bearing status (toe touch weight bearing, partial weight bearing, or weight bearing as tolerated)
- Range of motion restrictions and limitations (modified motion exercises, no bending with fixed knee spacer and hip position precautions
- Braces and splints (If applicable)
- Durable medical equipment (elevated toilet seat, easy-up cushion, long-handle sponge and reacher)
- Home care / in-patient rehabilitation

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Infection in a Hip or Knee Joint Replacement

Stavros Niarchos Foundation Complex Joint Reconstruction Center

Infection in a Hip or Knee Joint Replacement

There are a variety of ways to treat infection in a hip or knee joint replacement. You, your surgeon, and a physician who specializes in infectious disease, will determine the best treatment after considering factors specific to you. These factors include: your overall health, the type of bacteria in your joint replacement, the estimated duration of time the infection has been present, the type of implant you have, and the quality of your soft tissues and bone.

The management of infection in a hip or knee replacement includes both surgery and antibiotic therapy. Surgical options include washing and removing the infected tissue with or without removing the implants.

The following sections will detail the course of your treatment. Please keep in mind that the following information is only a general guide as the treatment for prosthetic joint infections is often individualized.

Please review all written material and contact the Patient Education Team at **212 606-1263** Monday through Friday between 9am and 3pm for any related questions.

PRE-SURGICAL SCREENING

☐ **Joint Aspiration**
Joint aspiration (sampling of fluid from around the implant) will be done prior to surgery to help determine the type of bacteria causing the infection.

☐ **Radiographs/Imaging**
Plain x-rays and other imaging studies (MRI, CT, arthrograms, and sometimes a bone scan) may be used to aid with the diagnosis of infection and in surgical planning and preparation. Please note that MRI is completely safe in the presence of most orthopedic implants and you will be advised if it is indicated in your particular case.

☐ **Medical clearance**
All patients will meet with an internal medicine doctor to ensure that they are medically fit to undergo the surgery necessary to treat your infection. In addition, you will likely meet with an Infectious Disease physician who will determine the best antibiotic regiment to treat the infection.

TREATMENT OPTIONS

☐ **Irrigation and Debridement with retention of implant**
This option is usually reserved for recently diagnosed infections and is also known as a "wash out". Infected tissue and fluid will be removed at surgery. After surgery, a course of intravenous antibiotic therapy and long-term oral antibiotics to suppress the bacteria is often required. The likelihood of a relapse of infection is dependent on the type of bacteria and can be higher than for a patient who undergoes removal of implants. However irrigation and debridement with retention of implant carries less operative risk and reduces recovery time. Sometimes a limited exchange of components is performed.

☐ **One-stage exchange surgery (Removal and re-implantation of implant)**
This is an option for patients with healthy tissues and easily treatable bacteria. A one-stage exchange involves removal of the implants, rigorous "washing out" and re-implantation of new implants during the same procedure. The surgery is typically combined with a lengthy course of intravenous and oral antibiotics.

TREATMENT OPTIONS (CONTINUE)

☐ **Two-stage exchange surgery (Removal of implant and delayed re-implantation)**
This option is the most commonly used approach in the United States to eradicate a joint infection. A two-stage exchange involves 2 surgeries: the first "stage" is removal of the implants and placement of a temporary hip or knee "spacer" that contains high doses of antibiotics. After this surgery, a 4 to 6 weeks course of oral or intravenous antibiotics is prescribed to further eradicate the infection.

After a 2-3 week "holiday," free from antibiotics, fluid from the joint is removed and tested for infection. If there are no signs of infection, the second "stage" is then performed which entails removal of the antibiotic spacer and re-implantation of new prosthetic implants. The entire process, from removal of the infected implant to reimplantation of a new prosthesis, usually takes a minimum of 10 weeks (6 week antibiotic treatment IV, 2-3 week period off antibiotics, joint aspiration, re-evaluation & re-implantation), but some cases can take 6 months to complete.

HOSPITAL STAY / POST-OP RECOVERY

☐ **Antibiotic therapy**
The goal of antibiotic therapy in patients with infected joint replacements is to cure or control the infectious process. Most patients treated with debridement, one- or two-stage surgery require a 4 to 6 week course of bacteria specific intravenous antibiotic. Oral antibiotic treatment may be used depending on the bacteria for extended periods of time after final implantation.

An infectious disease specialist will be consulted to recommend the optimal treatment regimen and assist with managing care during the therapy which usually requires monitoring of blood tests. The infectious disease team reviews aspiration and culture results to identify the organism and/or select the appropriate antibiotic therapy.

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