

Anesthesia for Your Upcoming Joint Replacement Surgery

On the day of surgery you will be introduced to the Anesthesiologist assigned to provide you care. If your surgery is scheduled at Chandler Regional Medical Center or Scottsdale Healthcare's Shea campus, you will be assigned a hospital staff anesthesiologist. However, if your surgery is assigned elsewhere, then you will most likely work with Dr. Lori Ryan, who has worked in concert with Dr. Dungy for almost a decade.

PRE-OPERATIVE ANESTHETIC INSTRUCTIONS

You will receive information regarding when to last eat and drink, as well as instructions on which medications to continue or discontinue prior to surgery from Dr. Dungy's office staff per his recommendations. These instructions are important to follow, as liquid or solid food intake too close to your scheduled surgery time can lead to a delay or cancellation of surgery. This includes no smoking nor gum/candy chewing prior to surgery.

TYPES OF ANESTHESIA FOR YOUR TOTAL JOINT REPLACEMENT

Your medical history, expectations, and concerns are taken into consideration prior to an anesthetic plan being formed. Your safety, overall health and well-being are being cared for by the anesthesiologist.

GENERAL ANESTHESIA is provided by delivering medications that make you unconscious and unaware of pain. General anesthesia is achieved by both inhalation vapors (gases) and intravenous (IV) medications. This is often considered "going to sleep." During this type of anesthesia, the delivery of medication is carefully controlled, monitored, and adjusted with precision by your anesthesiologist.

REGIONAL ANESTHESIA is provided by injecting local anesthetic medication near nerves that serve the particular area of your body which requires surgery. Certain types of regional anesthesia, such as spinal blocks provide a complete blockade of pain in the desired area. There are certain medical conditions which prevent the use of a spinal anesthetic. Although this type of anesthesia provides pain-free surgery, it is often combined with general anesthesia or IV sedation which allows amnesia and or relaxation. Occasionally, your anesthesiologist may offer an indwelling pain-pump, which continuously delivers "numbing" medicine to the nerve in the area of surgery. This may provide excellent pain management for about one to two days post-operatively.

SEDATION ANESTHESIA includes the delivery of IV or inhalation anesthetics which many consider "twilight" anesthesia. This may prove adequate for you in combination with regional anesthetics.

A LOCAL ANESTHETIC is performed by injecting “numbing” medication, such as lidocaine, into a specific body part which will make it numb so a certain procedure can be performed. Local anesthetic may be used prior to a regional block as explained above; however, local anesthetic alone would not be an appropriate option for a major orthopedic surgery.

If you are having a total or partial knee replacement, or even a hip resurfacing or replacement then several different types of anesthesia may be used. For instance...

1. In the pre-operative holding area you may receive a sedative in your IV prior to being transported to the operating room. This will relax you and calm your nerves.
2. Once in the operative room a spinal anesthetic may be provided. This will serve as the anesthesia for surgery, but it also allows the administration of morphine (a narcotic used for pain control) into the spinal space, which may provide additional pain control for several hours after the spinal block has “faded” away.
3. General anesthesia usually accompanies the spinal.
4. At the end of the cases while still sleeping, a nerve block may be provided to continuously deliver medication to numb the nerves to the hip/knee through a catheter near your groin. Occasionally, this may be provided in the pre-operative holding area prior to surgery.
5. Once in your hospital room, additional measures may be taken by your anesthesiologist to aid in pain control such as a patient controlled analgesia (PCA) device. This is a button that allows you individualized use of an IV narcotic for pain control instead of waiting on a busy nurse to deliver medication. However, only you should push the button, not family members nor friends since there is a risk of overdosing or even death if the medication is given while you are sedated or sleeping.

FREQUENTLY ASKED QUESTIONS

- **Who is an Anesthesiologist?** Anesthesiologists are doctors of medicine who have completed an additional four years of post-medical school training, three of which are in an anesthesiology residency program. Their knowledge-base emphasizes internal medicine, and how various conditions affect your response to the stress of surgery. Their role will go beyond simply “putting you to sleep” and “waking you up.”

Prior to surgery the Anesthesiologist will review your medical background and the proposed surgical procedure to formulate a plan for you. During surgery, the physician will monitor your vital signs and use this information to regulate the anesthetic medications delivered during your surgery. Their role will continue once the effects of anesthetic medications have been reversed by providing care supervision while you are in the recovery room.

The goal of your Anesthesiologist will be to utilize a variety of options to maximize your treatment not only to provide you with surgical anesthesia, but to assist in the delivery of care that will decrease your post-operative pain.

The American Society of Anesthesiology has an excellent link which provides a generous amount of information for patient education in the field of Anesthesiology. The following is the website link to this resource:

<http://www.asahq.org/patientEducation.htm>

- **How safe are spinal anesthetics?** Often concerns about paralysis or spinal headaches top the list of concerns. Rest assured, spinal anesthetics are indeed a safe choice for lower extremity joint replacement. There is a common misconception that this type of anesthetic is associated frequently with the above mentioned complications. In fact, this type of anesthetic has a long history of safe use with the risk of major complication mirroring that of general anesthesia. In addition, with the historical change of the types of needles used for spinal anesthetic placement, the risk of “spinal headache” is less than one percent. If a spinal headache were to occur, it will be consider troublesome for the affect patient; however, it is not a life threatening problem and is often very short-lived.
- **What are the advantages of a spinal anesthetic?** There are several reasons for the use of spinal anesthetics. The use or regional anesthesia leads to a reduction of general anesthetic agent delivered, lending to a more rapid recovery of mental alertness. Regional anesthetics have been reported to provide an operating environment associated with a reduction in blood loss due to regional blood pressure reduction. They can also be used in combination with narcotics for pain control which provide prolonged relief in concert with the oral or IV medications used post-operatively.
- **What if I have questions about anesthesia prior to surgery?** Some patients may have additional questions regarding their anesthesia care; others may have specific medical conditions that require more extensive information in order to provide a safe anesthetic. Dr. Dungy has an excellent working relationship with any of the Anesthesiologist that may be assigned to provide you care. His office staff will assist you if more contact is required. Please feel free to ask.