

Anesthesia and Plastic Surgery Questions

▼ Anesthesia Questions

► What does an Anesthesiologist do?

Most people believe that anesthesiologists are the doctors who administer medications which keep them from feeling pain and sensations. However, few people realize that beyond ensuring the patient's comfort, today's anesthesiologists' primary role in the operating room is to make informed medical judgments to protect and regulate the patient's critical life functions that are affected by the surgery being performed. Also, these medical specialists are the doctors who will immediately diagnose and treat any medical problems that might arise during surgery or the recovery period.

Anesthesiologists need a wide range of knowledge about medications, internal medicine, how the human body works, and its responses to the stress of surgery. As physicians, anesthesiologists are responsible for administering anesthesia to relieve pain and for managing vital life functions, including breathing, heart rhythm, blood pressure, and brain and kidney functions during surgery. As doctors, they manage, and treat any medical problems which may be present before surgery or that may develop during or immediately after surgery. Those patients who have received medical evaluations or treatment from their physicians before surgery must have that same medical care continued during surgery by their anesthesiologist.

Prior to surgery, anesthesiologists evaluate the patient's medical condition and formulate an anesthetic plan for each individual patient taking into consideration that patient's physical status. During surgery, advanced technology is used to monitor the body's functions. Anesthesiologists must interpret these sophisticated monitors in order to appropriately diagnose, regulate and treat the body's organ systems while a personalized, very delicate balance of anesthetic medications is administered.

At the conclusion of surgery, anesthesiologists reverse the effects of the anesthetic medications, and return the patient to consciousness once again. They maintain the patient in a comfortable state during recovery, and are involved in the provision of critical care medicine in the intensive care unit. Some Anesthesiologists, such as NCSS's Dr. Scott, are also involved in the practice of pain management outside the operating room.

► What training do the Anesthesiologists at NCSS have?

Anesthesiologists are doctors of medicine who, after graduating from college with a strong background in physics, chemistry, biology and mathematics obtain a medical doctorate degree after completing four years of medical school.

After medical school, today's anesthesiologists learn the medical specialty of anesthesiology during an additional four years of postmedical school training (one year of internship and three years in an anesthesiology residency program).

During the first year, anesthesiologists must complete training in diagnosis and treatment in other areas of medicine-such as internal medicine, neurology, obstetrics, pediatrics or surgery-or complete a rotating internship where they spend an equal amount of time training in each of the other areas of medicine. Today's anesthesiologists then spend three intensive years of training in anesthesiology learning the medical and technical aspects of the specialty. In addition, they may further specialize in a subspecialty, such as neurosurgical anesthesiology, by completing one to two more years in a subspecialty training program.

But, even when residency training is completed, anesthesiologists continue to spend a great deal of time in special courses and seminars studying new medical advances and anesthetic techniques throughout their careers. Today's anesthesiologists are educated in cardiology, critical care medicine, internal medicine, pharmacology and surgery to be able to fulfill their role in

modern medicine.

▶ **How will I meet my NCSS Anesthesiologist?**

Your Newport Center for Special Surgery anesthesiologist or an associate will interview you before your anesthesia to gather the information needed to evaluate your general health. This interview may be a telephone call, a visit to the facility or a visit in the office. Laboratory tests may be ordered, and other medical, surgical and anesthetic records will be reviewed. You may be asked to fill out a questionnaire about your previous anesthetic experiences and medical conditions, medications and allergies you may have. If you have particular concerns, you should discuss them with the anesthesiologist at that time.

▶ **Are there different kinds of Anesthesia?**

There are three main categories of anesthesia: general, regional and local. Each has many forms and uses.

In general anesthesia, you are unconscious and have no awareness or other sensations. There are a number of general anesthetic drugs. Some are gases or vapors inhaled through a breathing mask or tube and others are medications introduced through a vein. During anesthesia, you are carefully monitored, controlled and treated by your anesthesiologist, who uses sophisticated equipment to track all your major bodily functions. A breathing tube may be inserted through your mouth and frequently into the windpipe to maintain proper breathing during this period. The length and level of anesthesia is calculated and constantly adjusted with great precision. At the conclusion of surgery, your anesthesiologist will reverse the process and you will regain awareness in the recovery room.

In regional anesthesia, your anesthesiologist makes an injection near a cluster of nerves to numb the area of your body that requires surgery. You may remain awake, or you may be given a sedative. You do not see or feel the actual surgery take place. There are several kinds of regional anesthesia. Two of the most frequently used are spinal anesthesia and epidural anesthesia, which are produced by injections made with great exactness in the appropriate areas of the back. They are frequently preferred for childbirth and prostate surgery.

In local anesthesia, the anesthetic drug is usually injected into the tissue to numb just the specific location of your body requiring minor surgery, for example, on the hand or foot.

▶ **May I request what type of anesthesia I will receive?**

Yes, in certain situations. Some operations can be performed using different anesthetic procedures. Your anesthesiologist, after reviewing your individual situation, will discuss any available options with you. If there is more than one type of anesthetic procedure available, your preference should be discussed with your anesthesiologist in order for the most appropriate anesthetic plan to be made.

▶ **Will I have any side effects?**

The amount of discomfort you experience after surgery will depend on a number of factors, especially the type of surgery. Your doctors and nurses can relieve pain after your surgery with medicines by mouth or injection or by numbing the area around the incision. Your discomfort should be tolerable, but do not expect to be totally pain-free.

Nausea or vomiting may be related to anesthesia, the type of surgical procedure or postoperative pain medications. Although less of a problem today because of improved anesthetic agents and techniques, these side effects continue to occur for some patients. Taking anti-nausea medications prior to surgery can reduce your chance of having nausea afterwards.

It is common with general anesthesia to have a sore throat for several days after your surgery. A salt water gargle afterwards can help minimize this. Medications to minimize postoperative pain,

nausea and vomiting are often given by your anesthesiologist during the surgical procedure and in recovery.

▶ **How fast will I wake up after anesthesia?**

While recovery time varies from person to person and with each type of procedure, modern anesthesia techniques allow the majority of people wake-up within a few minutes after the surgery is done. Some tiredness is expected, as is soreness in the surgical area. After about 30 minutes, most people are able to go home.

▶ **Are there things that can be done to limit nausea after anesthesia?**

Yes, there are several things your anesthesiologist can do to limit the possibility of you having nausea after anesthesia. There are oral medications that can be taken before surgery, anesthesia techniques known to limit the risk, and medications after surgery that can be given. Please discuss your concerns, especially if you have a history of nausea after anesthesia, with your Newport Center anesthesiologist before the day of your surgery so all options can be explored.

▶ **If I have an underlying problem, how will it be handled during surgery?**

Frequently, people requiring surgery may also have some underlying condition such as diabetes, asthma, heart problems, arthritis or others. Having taken your medical history prior to the operation, your anesthesiologist has been alerted and will be well prepared to treat such conditions during surgery and immediately after. As doctors, anesthesiologists are uniquely suited to treat not only sudden medical problems related to surgery itself, but also the chronic conditions that may need attention during the procedure, because their medical training involves a firm grounding in the principles of internal medicine and critical care.

▶ **What are the risks of anesthesia?**

All operations and all anesthesia have some small risks, and they are dependent upon many factors including the type of surgery and the medical condition of the patient. Fortunately, adverse events are very rare. Your anesthesiologist takes precautions to prevent an accident from occurring just as you do when driving a car or crossing the street.

The specific risks of anesthesia vary with the particular procedure and the condition of the patient. You should ask your anesthesiologist about any risks that may be associated with your anesthesia.

To help anesthesiologists to provide the best and safest patient care possible, national standards have been developed by the American Society of Anesthesiologists to enhance the safety and quality of anesthesia. Specific standards already have been developed regarding patient care before surgery, basic methods of monitoring patients during surgery, patient care during recovery. New standards continue to be developed to further ensure patient safety. These standards, along with today's sophisticated monitoring and anesthesia equipment as well as improved medications and techniques, have contributed enormously toward making anesthesia safer than ever before.

▶ **What happens after I lose consciousness during general anesthesia?**

Beginning Phase: A great deal besides surgery takes place between the beginning of your anesthesia and your return to consciousness in the Post Anesthesia Care Unit. Your anesthesia probably will be started with an "induction agent"; a common one with which you may be familiar is propofol. You may have heard that this induction agent was used by Michael Jackson as a sleep medication. Propofol is used during the first step (induction) of your anesthesia when you "drift off to sleep" and lasts only a few minutes. It is very safe when used in a proper surgical setting.

In order to keep you anesthetized, your anesthesiologist administers and regulates additional and more potent medications that are necessary to maintain your anesthesia for the rest of the procedure. Some of these medications such as propofol are given through your I.V. into your veins and others, such as nitrous oxide, are inhaled through your lungs because they are gases. Inhaled gases are administered to patients who receive general anesthesia with "oxygen" being the most important gas. These gases are administered either through a mask or a special breathing tube which is inserted into your windpipe (trachea) depending upon your surgical procedure and physical condition.

Middle Phase: Exactly which medications will be administered to you during anesthesia will be determined by your physical responses and how they will be affected by the type of surgery you are having and by your medical status. Therefore, your anesthesiologist will carefully tailor your anesthetic just for you. Some of these medications will be the actual anesthetic agents that help you to remain unconsciousness and experience no sensations, while others are administered to regulate your vital functions such as heart rate and rhythm, blood pressure, breathing, and brain and kidney functions.

Your anesthesiologist constantly is monitoring, evaluating and regulating your critical body processes because they can change significantly during the operation due to the stress and reflexes from surgery itself, the effects of the anesthetic medications and your medical condition. For example, in most operations specialized equipment is used to actually control the patient's every breath. (This is because certain medications temporarily decrease breathing capability, which is further reduced by necessary muscle relaxants.)

Your anesthesiologist also is responsible for and will treat any medical problem which you may develop during surgery such as a blood pressure problem. However, your anesthesiologist wants to help prevent any medical problems by using and interpreting today's sophisticated monitoring equipment and knowing when and how to treat your body's responses to surgery.

Recovery Phase: When surgery is completed, the recovery phase is carefully timed and controlled. Anesthetic agents are discontinued and new medications may be given to reverse the effects of those administered previously. Body temperature, breathing, blood pressure, and other functions begin to normalize. Before your total recovery, you may receive some medications to decrease postoperative discomfort. All of this is calculated precisely under the supervision of your anesthesiologist to permit you to return to consciousness in the recovery room unaware of what has occurred during the operation.

► **What safety monitors are used during surgery?**

Microchips, finger cuff sensors, memory banks, tiny electrodes, glowing displays and thermometers made of liquid crystal are just some of the equipment anesthesiologists can use to monitor a patient's progress during and after surgery. Second by second observation of even the slightest changes in a wide range of body functions give anesthesiologists an extraordinary amount of information about a patient's well-being. Monitoring is one of the important roles anesthesiologists handle in the course of surgery.

► **Why are patients not allowed to eat or drink anything before surgery?**

For most procedures it is necessary for you to have an empty stomach so that the chances of regurgitating any undigested food or liquids is greatly reduced. Some anesthetics suspend your normal reflexes so that your body's automatic defenses may not be working. For example, your lungs normally are protected from objects, such as undigested food, from entering them. However, this natural protection does not occur while you are anesthetized. So for your safety you may be told to fast (no food or liquids) before surgery. Your doctor will tell you specifically whether you can or cannot eat and drink and for how long. In addition, the anesthesiologist may instruct you to take certain medications with a little water during your fasting time. For your own safety, it is very important that you follow these instructions carefully about fasting and medications; if not it may be necessary to postpone surgery.

▶ **Why are so many questions asked about my past and present medical conditions?**

Because anesthesia and surgery affect your entire system it is important for your anesthesiologist to know as much about you as possible.

You already realize that your anesthesiologist is responsible for your anesthesia to make you comfortable, but in addition, he or she is also responsible for your medical care during the entire course of surgery. Therefore, it is important to know exactly what medical problems you have and any medications you have been taking recently since they may affect your response to the anesthesia. You also should inform your anesthesiologist about your allergies, any hard drug or alcohol usage, and past anesthetic experiences.

Your anesthesiologist must be very familiar with your medical condition so that the best anesthetic and medical care may be provided throughout your operation. This important knowledge will allow your anesthesiologist, as a doctor, to continue your current medical management into surgery which will help prevent complications, and expedite diagnosis and treatment of any medical problems should they occur. Your continued medical management during surgery is necessary to help facilitate your speedy recovery.

▶ **Why talk about drinking, herbs and smoking?**

Cigarettes, herbs and alcohol affect your body just as strongly and sometimes more than any of the medically prescribed drugs you may be taking. Because of their various effects on your lungs, heart, liver and blood, to name a few, cigarette, herbs or alcohol consumption can change the way an anesthetic drug will work during surgery, so it is crucial to let your anesthesiologist know about your consumption of these substances. This is also true, especially true, for so-called "street drugs"-marijuana, cocaine, amphetamines and the rest. People are sometimes reluctant to discuss these things, but it is worth remembering that such discussions are entirely confidential between you and your doctor. Your anesthesiologist's only interest in these subjects is in learning enough about your physical condition to provide you with the safest anesthesia possible. So, in this case honesty is definitely the best policy, and the safest one.