# TABLE OF CONTENTS

- What is anesthesia? .......................................................... 1
- What types of anesthesia are there? .................................. 1
- What are the risks? .......................................................... 3
- What happens before surgery? ......................................... 4
- What happens in the operating room during general anesthesia? ........ 7
- What happens after surgery? ............................................. 7
- What are common side effects? ....................................... 9
- How do I prepare my child for anesthesia? ....................... 9
- Anesthesia during pregnancy .......................................... 10
- Frequently asked questions ........................................... 11
- City of Hope Division of Anesthesiology ......................... 14
- Additional Resources ..................................................... 15
- Pre-anesthesia Questionnaire .......................................... 17
- Managing postoperative pain .......................................... 20
WHAT IS ANESTHESIA?

Anesthesia is the use of medicine to keep you safe and comfortable during your surgery or procedure. Different types of anesthesia may be used either alone or in combination to obtain the desired results for your surgery/procedure.

WHAT TYPES OF ANESTHESIA ARE THERE?

**Local anesthesia** numbs only the part of the body where you will have surgery. Anesthetic medicines are injected or applied to the surface of the skin, nose or mouth to temporarily block nerves in the surgical area. This type of anesthesia is used for minor procedures. Since local anesthesia only affects the nerves in the surgical area and not your brain, you may be awake during the procedure.

**Regional anesthesia** eliminates feeling in a larger part of the body. It blocks the spinal cord or groups of nerves, so pain signals cannot reach the brain. This type of anesthesia is used for certain procedures to the chest, abdomen, pelvis, arms or legs. You may remain awake during the procedure, or you may be given additional medications to keep you sedated or sleepy.

The type of regional anesthesia and how much medication is used will determine how long the anesthetic effect will last. You may ask your anesthesiologist what types of anesthesia are available for your particular procedure.

**Common types of regional anesthesia:**

- **Spinal anesthesia** is an injection of anesthetic directly into the fluid that surrounds the spinal cord in your back.

- **Epidural anesthesia** is an injection of anesthetic into the space between the spinal cord and the outer lining of the spinal cord called the epidural space.

- **Nerve block anesthesia** is an injection of anesthetic near a group of nerves to temporarily numb a part of the body, such as an arm or leg.

There is always a possibility that a local or regional anesthetic may have to be changed to a general anesthetic if it does not last long enough or if any issues arise during surgery.
Monitored anesthesia care (MAC) is a type of sedation given through an intravenous (IV) line into your vein. You may still be awake during the procedure, but you will be in a more relaxed state. This type of anesthesia may be used for less invasive (not deep into the body) surgery. Local anesthetic may also be used on the area on your body where you will have surgery done.

General anesthesia is needed for major operations and temporarily produces unconsciousness, so your brain does not recognize any pain signals. This type of anesthesia may be given through gases or vapors you breathe in through a mask or tube and an intravenous (IV) line into your vein. With this type of anesthesia, you will be completely asleep. Most of our procedures at City of Hope involve a general anesthesia.

**TYPES OF ANESTHESIA:**

- **Local anesthesia** numbs just a small part of the body.
- **Regional anesthesia**, such as nerve block, spinal or epidural anesthesia, numbs a larger part of the body.
- **Monitored anesthesia care** is intravenous sedation where you may be awake but in a more relaxed state.
- **General anesthesia** produces unconsciousness. You are asleep throughout the procedure.
WHAT ARE THE RISKS?

All procedures have risk, which depend on factors, including your type of surgery, type of anesthesia and your medical condition. Some of the risks of undergoing anesthesia are listed below. Fortunately, these events are rare and the anesthesiologist takes every precaution to prevent them from occurring.

**Risks of anesthesia:**

- Allergic reaction to the medicine
- Aspiration pneumonia (inhaling stomach contents into the lungs)
- Infection
- Bleeding
- Heart attack
- Stroke
- Nerve damage
- Hyperthermia (very high temperature)
- Visual disturbances or loss of sight
- Cognitive dysfunction
- Death

Some of these complications are related to the procedure and/or your position during the procedure. The risks increase with the length of the procedure. Very long procedures have a higher risk of complications. Your anesthesiologist will take all the necessary steps to reduce any risks of complications from the moment you enter the operating room until the time you are comfortable in the recovery room.

Having a regional anesthetic instead of a general anesthetic does not necessarily decrease the risk of a complication. A regional anesthetic is not always possible and the intended effects of regional anesthesia are less predictable than general anesthesia.

There may be other risks that the anesthesiologist will talk to you about. If you have questions or concerns about the risks, please discuss them with the anesthesiologist.
WHAT HAPPENS BEFORE SURGERY?

Special tests
Your doctor may order special tests before surgery, such as blood tests, X-rays or other tests.

Fasting
You may be told to fast (no food or drink) before surgery. Your doctor will tell you if you can or cannot eat and drink and for how long before your surgery. If you do not follow your doctor’s instructions, your surgery may be delayed or canceled.

The following is a sample fasting schedule. Your fasting schedule may vary according to the type of procedure you are having. If you have questions, please speak with your doctor or nurse.

Sample Fasting Schedule

<table>
<thead>
<tr>
<th>Seven days before your procedure</th>
<th>Stop taking aspirin, ibuprofen and/or herbal preparations, unless otherwise instructed by your doctor. If you are taking blood thinners, please discuss this with your doctor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The day before your procedure</td>
<td>Regular meals for breakfast, lunch and dinner. Keep well hydrated.</td>
</tr>
<tr>
<td>Starting at midnight before your procedure</td>
<td>As a general rule, NO FOOD OR LIQUIDS starting at midnight before your procedure unless directed otherwise by your surgeon. Depending on the type of procedure you are having and the time it is scheduled, your doctor may allow you to have clear liquids and/or some of your medications.</td>
</tr>
</tbody>
</table>
Medications

Be sure to inform your anesthesiologist of all medications you take. This includes prescription and nonprescription medications, herbal or vitamin supplements, and any street drugs, as these can react dangerously with some anesthesia drugs. Your doctor may tell you to continue, change or stop your medications before your surgery.

The following is a list of common medications that are continued or stopped before surgery. If you are unsure about what to do with your medications, please speak with your doctor or nurse.

Medications usually continued before surgery:

- Medications for peptic ulcers, stomach ulcers, duodenal ulcers, acid reflux, GERD (gastro-esophageal reflux) or hiatal hernia
- Heart medications
- Some blood pressure medications. Your doctor or nurse will tell you which ones to continue and which ones to stop.
- Medications for seizure or epilepsy
- Asthma medications. Bring your inhaler with you.
- Statins or cholesterol medications

Take these medicines the morning of your surgery with a sip of water, even if you normally take them at night.

Medications usually stopped before surgery:

- Seven days before your procedure stop taking aspirin, ibuprofen and/or herbal preparations, unless otherwise instructed by your doctor.
- Tell your doctor if you are taking blood thinners, for example Coumadin (warfarin) or Plavix (clopidogrel). You may be instructed to stop taking them before surgery or to change the dose.
- DO NOT TAKE medications for diabetes the morning of your surgery.

If you have any questions about whether or not to take a medication, please ask your doctor or nurse.
If you have heart disease, a pacemaker or an automatic implantable cardioverter-defibrillator (AICD), heart catheterization or ever had heart surgery, please provide a report from your cardiologist (the doctor who specializes in heart problems, not your primary or family doctor) regarding the condition of your heart and your pacemaker or AICD.

Transportation

If you will be going home after surgery, arrange for someone to drive and stay with you for the rest of the day. Make transportation and personal arrangements in advance. Provide the admitting nurse with your driver’s name and contact number or location.

Pre-anesthetic evaluation

The anesthesiologist will perform a pre-anesthetic evaluation to:

• Learn about your medical condition.

• Inform you of the risks, benefits and choices regarding anesthesia.

• Answer questions or discuss any concerns you may have.

To help you prepare for the evaluation, a questionnaire is included in the back of this booklet.

You will be asked if you have any medical problems, such as heart disease, high blood pressure, kidney disease, diabetes or asthma. You will also be asked whether you have had anesthesia before, what type it was and if you had any problems. The anesthesiologist will also need to know if you have a blood relative (a parent, brother or sister) who has had a problem with anesthesia.

After reviewing your medical condition, the anesthesiologist will develop an anesthetic plan. Your medical condition, type of surgery and your personal preferences determine the plan. We will go over your anesthetic plan, including the type of anesthesia you will receive and our plan for minimizing pain and nausea after surgery. During the surgery itself, a member of our anesthesia team will be with you during the entire procedure and will help guide your care after surgery.
WHAT HAPPENS IN THE OPERATING ROOM DURING GENERAL ANESTHESIA?

Once in the operating room, the anesthesiologist will place a variety of monitors on you to measure your blood pressure, heart function, breathing and oxygen content in your blood. You will be given oxygen to breathe through a mask.

Then, you will be given anesthetic drugs through your IV (intravenous) line and/or through your lungs by breathing anesthetic gases. The anesthesiologist adjusts your medications to keep you asleep and pain free for the entire procedure. During surgery, your condition is carefully monitored, evaluated and controlled. A member of the anesthesia team is with you throughout the surgical procedure.

At the end of the surgical procedure, the anesthetic agents are stopped and medications may be given to reverse the effects of earlier medications. You will then be transferred to the Post-anesthesia Care Unit for recovery.

During your surgery and recovery time, your family and friends may stay in a waiting area where the surgeon can find them at the end of the procedure.

WHAT HAPPENS AFTER SURGERY?

The Post Anesthesia Care Unit (PACU)

When your surgery is over, you will be observed for a period of time in an area called the PACU, also known as the recovery room. There, the nursing staff will watch you closely. You should tell the nurse if you are having any pain, nausea or any other discomfort. Once your condition has met certain criteria, you will be discharged from the PACU.

Admission to the inpatient unit

Depending on your type of surgery and condition, you may have to stay overnight or longer in the hospital. If this is the case, you will be taken from the PACU to your hospital room. Your family and friends can join you in your room. Any personal belongings stored by hospital staff will be brought to your room.

Outpatient surgery

If your procedure does not require an overnight stay, you may go directly home after your recovery from anesthesia. If you need additional observation
before being discharged from the hospital, you will be brought to a special room for a short period of time. There your nurse will watch you closely until you are ready to go home.

Before going home, you will be given instructions on how to take care of yourself there. Instructions will include use of equipment pertinent to your care, special care or procedures you may need to do, medications, activity restrictions if necessary, diet, a follow-up appointment plan, symptoms to watch for and to report, and a contact number for your doctor or nurse.

If you do not receive this information, do not understand the instructions or have any questions, please speak with your doctor or nurse.

**Information about driving and conducting business after your surgery:**

- You must have someone drive you home after surgery.
- Make arrangements for someone to stay with you for the rest of the day or for 24 hours after your procedure if you had general anesthesia.
- Stay at home the remainder of the day and rest. If you do not feel recovered the next day, continue to rest for another day or two. Even minor surgery may be taxing on your physical strength.
- If you have small children, make arrangements for someone else to care for them.
- Do not operate a vehicle or dangerous equipment, sign contracts or make important decisions for 48 hours after surgery.

Even though you will probably feel well after the first day, your reflexes are depressed and can take up to 48 hours to return to normal.
WHAT ARE COMMON SIDE EFFECTS?

Common side effects such as headache, sleepiness, nausea, vomiting, thirst and shivering can occur to a greater or lesser degree with all types of anesthesia. However, other more specific side effects you may experience will depend on the type of anesthesia you were given.

The more common side effects associated with the different types of anesthesia are listed below. There may be others the anesthesiologist will tell you about. It is important to tell your doctor or nurse if you are having any of these side effects. Your doctor expects these situations and may be able to provide some relief.

COMMON SIDE EFFECTS:

• Local or regional anesthesia may give you muscle weakness, numbness, tingling, nausea, backache or headache.

• Monitored anesthesia care may give you headache, sleepiness or nausea and vomiting.

• With general anesthesia you may feel nausea, thirst, shivering or a sore throat or jaw.

HOW DO I PREPARE MY CHILD FOR ANESTHESIA?

Read through this booklet and learn what to expect so you will be more confident and better prepared to talk with your child calmly and honestly about the experience. Some helpful tips are given below.

• Tell your child what to expect. Children do better with anesthesia when they are prepared.

• Answer your child’s questions. Be honest with your answers. If you do not know the answer, find out.

• Allow your child to share. Do not minimize or belittle your child’s feelings. Let your child know it is OK to feel afraid.
• Be there with your child. Sit at the bedside and comfort your child. In some situations, it may be possible to be with your child right after surgery when she/he is in the recovery room.

• Be calm. Your own fears and anxieties can be transferred to your child. Children do better before and after surgery when you are calm.

• Ask questions. If anything is unclear to you, then it is probably unclear to your child. If you have questions or concerns, ask your anesthesiologist.

• If your child wants to bring his favorite toy, allow him or her to do so (if the size of the toy is reasonable). Children feel better when they have familiar objects around them.

ANESTHESIA DURING PREGNANCY

Over 75,000 women in the United States have nonobstetric surgery during pregnancy every year. Although there is a lack of evidence that anesthesia causes harmful effects on the mother or unborn child, the following advice is usually given:

• Minimize exposure to anesthetics during pregnancy.

• Whenever possible, delay the operation until after delivery.

• If it is not possible to delay surgery until after delivery, then delay surgery until the second or third trimester of pregnancy.

• If both of the above options are not possible due to the urgency of the situation, proceed with the surgery.

Anesthesiologists are trained to use medicines safely and will choose drugs based on the general medical condition of the patient and the needs of the surgery.

Surgery itself may have an effect on the mother and unborn child and you should ask your surgeon for more information. Other treatments such as chemotherapy and radiation or other conditions such as immunosuppression may also have an effect on the pregnancy and you should ask your oncologist for details.
FREQUENTLY ASKED QUESTIONS

Can I choose my anesthesia?
Some procedures can be done using different anesthetic methods. After the anesthesiologist reviews your individual situation, you can discuss your options with him or her and come to a mutual decision on the anesthetic plan.

Why do you ask about my medical history?
The anesthesiologist is responsible not only for your anesthesia, but also for your medical care during the entire course of the surgery. Therefore, the anesthesiologist must be very familiar with your medical condition.

Why do you ask about drinking and smoking?
Tobacco and alcohol affect your lungs, heart, liver and blood and can change the way an anesthetic drug works during surgery. Alcohol interacts with all the medicines used for anesthesia. In addition, a history of smoking may affect your breathing during surgery and may delay or prevent tissue/wound healing after surgery.

Why do you ask about herbal products?
Many herbal products on the market are considered safe while others may be potentially harmful. Some of these products can cause side effects or react with other medicines. They may intensify the effect of the anesthetic, interfere with blood pressure control or cause bleeding.

Therefore, it is essential that you tell your doctor if you are using herbal products and which ones you use. Your doctor will discuss this with you and may make recommendations about continuing, changing or stopping them before surgery.

Why does the anesthesiologist ask me all these same questions again?
Asking you the same questions again serves several purposes. First, the interview before surgery serves as an additional means to verify your identity. Second, it is not unusual for patients to recall significant events or details during the interview that were left out of the written records. Third, it gives you one more opportunity to ask questions that you may have not thought of or not had a chance to ask before.
Can I get addicted to the drugs you are going to give me?
There is no evidence that any drug given during anesthesia causes addiction.

Why can I not eat or drink before surgery?
Your doctor may tell you to fast (no food or liquids) before surgery so there is less chance of vomiting and aspirating (inhaling into the lungs) any undigested food or liquids during the procedure. Aspiration can cause pneumonia (a very serious disease of the lungs) or even death.

Will I be completely asleep during the procedure? Will I wake up in the middle of my operation?
If you are having a general anesthetic, you will be completely asleep and will not wake up in the middle of the procedure. There are reports of awareness under anesthesia, but they are extremely rare. If this issue concerns you, ask your anesthesiologist for more details before the surgery.

If you are having a local or regional anesthetic, with or without intravenous sedation, you may be more or less aware of what is going on, as your surgeon requires and as your medical condition allows. Sometimes surgeons want the patient to be able to follow commands and answer questions; in that case, the patient needs to be more awake.

How do you adjust the duration of anesthesia?
The anesthesiologist will give an initial dose of anesthetic based on your weight and general health condition. Anesthetic medications are continuously given until the end of the surgery. Once the anesthetic is stopped, patients generally wake up within 10 to 20 minutes. Most anesthetic drugs in use today have a very short duration.

How will my pain be controlled after my procedure?
There are various methods to control your pain after surgery with medications, without medications or in combination. You and your doctor, nurse, pharmacist and other health care professionals will work together to design a pain management plan that is best for you.

Why do people sometimes have a sore throat after general anesthesia?
During general anesthesia your breathing is controlled through a tube inserted into your airway. Sometimes this tube causes irritation and a sore throat. This is temporary and will go away in a day or two without any further treatment.
How will my nausea be controlled after my procedure?

Nausea is a common side effect after surgery and can range from none or very mild to severe. Your doctor will order medication to lessen nausea as you recover. Your doctor or nurse may suggest other nondrug methods to help control your nausea.

I have had many anesthetics; will that make me lose my mental abilities?

No, there are many patients who receive multiple anesthetics and never had any problems on their mental abilities.
The City of Hope Department of Anesthesiology specializes in the care of surgery patients before, during and after their surgeries. From the staff of our Pre-anesthesia Testing Clinic to our experienced team of anesthesiologists and pain medicine specialists, we share a common goal — to provide our patients with a full spectrum of services carefully tailored to their specific needs with the aim of delivering compassionate, evidence-based and safe anesthetic care of the highest quality.

If you would like more information about our services or have questions about your anesthesia care at City of Hope, please call 626-256-HOPE (256-4673), ext. 62651.

Standing left to right: Christine Chang, M.D. (Director of Interventional Pain), John L. Raytis, M.D., Michael W. Lew, M.D. (Department Chair), Joe Paredes, M.D., Kenneth Son, M.D., M.P.H., Michael J. Sullivan, M.D., Russell Gray, M.D. (Director of the PATC), and Walter Chang, M.D. Seated left to right: Sarkis Baltayian, M.D., Gary Hum, M.D., Andrew Leitner, M.D., Robert Toroussian, M.D., Traci Biondi, M.D., and Ted Uchio, M.D.

At City of Hope, our team has extensive experience in providing a wide range of anesthetic services to patients. We look forward to meeting you on the day of your surgery and to helping make your surgical experience at City of Hope comfortable and safe.
ADDITIONAL RESOURCES

**American Society of Anesthesiologists**  
Headquarters Office  
520 N. Northwest Highway  
Park Ridge, IL 60068-2573  
Phone: 847-825-5586  
Fax: 847-825-1692  
Website: www.asahq.org

**American Society of Perianesthesia Nurses**  
10 Melrose Ave., Suite 110  
Cherry Hill, NJ 08003-3696  
Toll-free: 877-737-9696  
Phone: 856-616-9600  
Fax: 856-616-9601  
Website: www.aspan.org

**MedlinePlus**  
From the National Library of Medicine and the National Institutes of Health  
ANESTHESIA QUESTIONNAIRE
PRE-ANESTHESIA QUESTIONNAIRE

Please complete the following questionnaire and bring it with you to your procedure.

The information you supply below assists in the development of your anesthesia care. Please complete this questionnaire as accurately and thoroughly as possible.

Date _____________________
Patient Name ______________________________________________________
Age _______________ Weight _______________ Height _______________
Allergies ____________________________________________________________
_________________________________________________________________
_________________________________________________________________
Current Medications (Prescription and Nonprescription) ________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Complementary or Alternative Medications or Treatments ________________
_________________________________________________________________
_________________________________________________________________
_________________________________________________________________
Prior Surgeries ______________________________________________________
_________________________________________________________________
_________________________________________________________________

Be prepared to discuss the use of street drugs, alcohol and smoking during your pre-anesthetic interview. This information will remain confidential. The anesthesiologist’s only concern in this area is to develop an anesthetic plan for you that is safe and effective.
Please answer the following questions. These responses will help us develop an anesthetic plan that is best for you.

Yes  No  Have you had a cold or the flu lately?
Yes  No  Are you allergic to latex (rubber) products?
Yes  No  Have you or any blood relatives had difficulties with anesthesia?
Yes  No  Have you or any of your blood relatives ever been told you might have a fever triggered by anesthesia or MH (malignant hyperthermia)?
Yes  No  Have you had excessive nausea or vomiting after anesthesia?
Yes  No  Do you have motion sickness?
Yes  No  Have you or any of your blood relatives ever had a prolonged paralysis after anesthesia?
Yes  No  Did an anesthesiologist ever tell you there was any difficulty inserting the breathing tube in your throat?
Note: A sore throat after anesthesia is not a sign that there was any difficulty.
Yes  No  Have you ever had chest pain?
Yes  No  Do you have a heart condition? If yes, please provide a report from your cardiologist.
Yes  No  Have you ever had a heart attack, heart failure, chest pain, angina, pain in your neck, jaw, back or left arm, palpitations, irregular heartbeat, shortness of breath, heart murmur, mitral valve prolapse or any type of valvular heart disease (including stenosis or regurgitation)?
Yes  No  Do you have a pacemaker or defibrillator/AICD? If yes, please provide a report from your cardiologist.
Yes  No  Did you have any procedures for your heart, bypass, angioplasty, stents or balloons?
If yes, when was the procedure performed? ____________
Yes  No  Do you have hypertension (high blood pressure)?
Yes  No  Do you ever have shortness of breath?
Yes  No  Do you wake up from your sleep with shortness of breath?
Yes  No  Do you get chest pain or significant shortness of breath walking up two flights of stairs?

Yes  No  Do you have asthma, bronchitis, COPD, emphysema, wheezing, chronic cough, or any other breathing or lung problem?

Yes  No  If you have a chronic cough, do you cough up anything?

Yes  No  Have you had pneumonia in the last two months?

Yes  No  Have you had a blood clot in your lungs (pulmonary embolism) or phlebitis?
  If yes, did your doctor prescribe blood thinners? _____
  Are you still taking them? _____
  Did you have a filter placed? _____

Yes  No  Do you have sleep apnea or snore very loudly?

Yes  No  Do you use oxygen at home or a home respirator, CPAP or BiPAP?

Yes  No  Have you ever received chemotherapy?
  If so, do you know the names of the drugs you received for chemotherapy? _________
  Have you ever received bleomycin? _____

Yes  No  Did you ever have radiation?
  If so, on what part of your body?_______

Yes  No  Do you (or did you) smoke?
  Packs per day _____ Number of years _____
  When did you quit? ____________

Yes  No  Do you drink alcohol? Drinks per week _____________

Yes  No  Do you take or have you taken recreational drugs (“street drugs”)?
  If so, when did you last take them? _______________________

Yes  No  Do you use herbal preparations?
  If yes, which ones? _______
  When did you take the last one?_______

Yes  No  Have you taken cortisone (steroids) in the last six months?

Yes  No  Do you have diabetes?

Yes  No  Have you had hepatitis, liver disease, cirrhosis (scarred and hardened liver), ascites (fluid in the abdomen) or jaundice?
  If you had hepatitis, do you know what type it was?_________
Yes  No  Do you have or have you had kidney disease?
    If yes, are you on dialysis? If so, when did you have your last dialysis before surgery? _______

Yes  No  Do you have a thyroid condition?

Yes  No  Do you have ulcers, acid reflux, heartburn, gastritis, hiatal hernia or any or other stomach disorders?

Yes  No  Do you have easy reflux or difficulty swallowing, or have you been vomiting or nauseated?

Yes  No  Do you have pain in your back or neck?

Yes  No  Have you had a stroke?
    If yes, do you have any residual effects? _______

Yes  No  Do you have numbness, weakness or paralysis of your arms or legs?

Yes  No  Do you have any muscle or nerve disease?

Yes  No  Do you have epilepsy or seizures?

Yes  No  Do you or anyone in your family have sickle cell trait or disease?

Yes  No  Do you have anemia, abnormal clotting, abnormal bleeding or bruising, or any other blood disease?

Yes  No  Do you have loose, chipped or false teeth or bridgework?

Yes  No  Do you have any piercings, such as studs or rings? Where?
    Please list all ________________________________

Yes  No  Do you wear contact lenses?

Yes  No  Have you ever been given a blood transfusion, plasma or platelets?

Yes  No  (Women) Are you pregnant or think you might be pregnant?
    Due date _____________

Yes  No  (Women) When was your last menstrual period? _____________
MANAGING POSTOPERATIVE PAIN:
A RESOURCE AND GUIDELINE FOR PATIENTS

For many patients, surgery can be an anxiety provoking experience. Many patients wonder if they will have severe pain afterward and how this will be treated. It is normal to have concerns about pain after surgery. Your City of Hope doctors and nurses are here to help you with these concerns.

There is research that shows that when patients actively participate in their pain management they have less pain when they return home after surgery. Research also shows that techniques such as the ones below can help with surgical pain. Follow the steps below:

**Step 1: Belly breathe**
Taking deep breaths from your abdomen can reduce anxiety and relax your muscles which helps relieve pain around your surgical site. Start by relaxing your arms and legs. Take a deep breath, counting to 5 while you draw a long deep breath in. Exhale out slowly, counting to 5 while you slowly breathe out. Relax your jaw. Relax your throat. Take another long, slow deep inhalation, counting to 5 while you inhale. Now exhale out again, slowly, making your exhale as long as your inhale. Repeat 10 times.

**Step 2: Guided imagery**
Visualizing pleasant, soothing places and situations can “trick” your brain into a state of lessened pain and anxiety. Imagine a place you’d like to go to, such as Hawaii. Imagine the smells, sounds, and sensations there, whether it is the sound of the ocean, the smell of salt water or the sensation of warm air on your skin. Take some deep breaths while you are picturing this (go back to step 1). If you do not have a favorite place, borrow one of ours! Ask your nurse for guided imagery DVDs you can watch in your room.

**Step 3: Positive distraction**
Research shows that a mind occupied with other thoughts is less able to experience pain. Work with your physical therapist and move as much as possible. Read, watch TV, do puzzles, talk to friends and family — do things to occupy your brain. If you are enjoying yourself, your body will release natural painkillers, called endogenous opioids, or “feel good” molecules that will fight pain.

**Step 4: Speak up**
Don’t be afraid to ask for pain medications if your pain persists. Often patients express concern they will become addicted to painkillers after surgery. Research shows this is very rare if medications are taken as directed.
The best way to prevent pain from developing in the future is to make sure you are managing it now, in the days following surgery.

**Step 5: Specialists are available**
If your pain still persists, City of Hope’s pain specialists are trained in various additional interventions that you may benefit from.

Remember, pain is our body’s natural response to trauma (surgery), but with the steps above, it can be well managed, with minimal impact on your recovery.

**NOTES:**