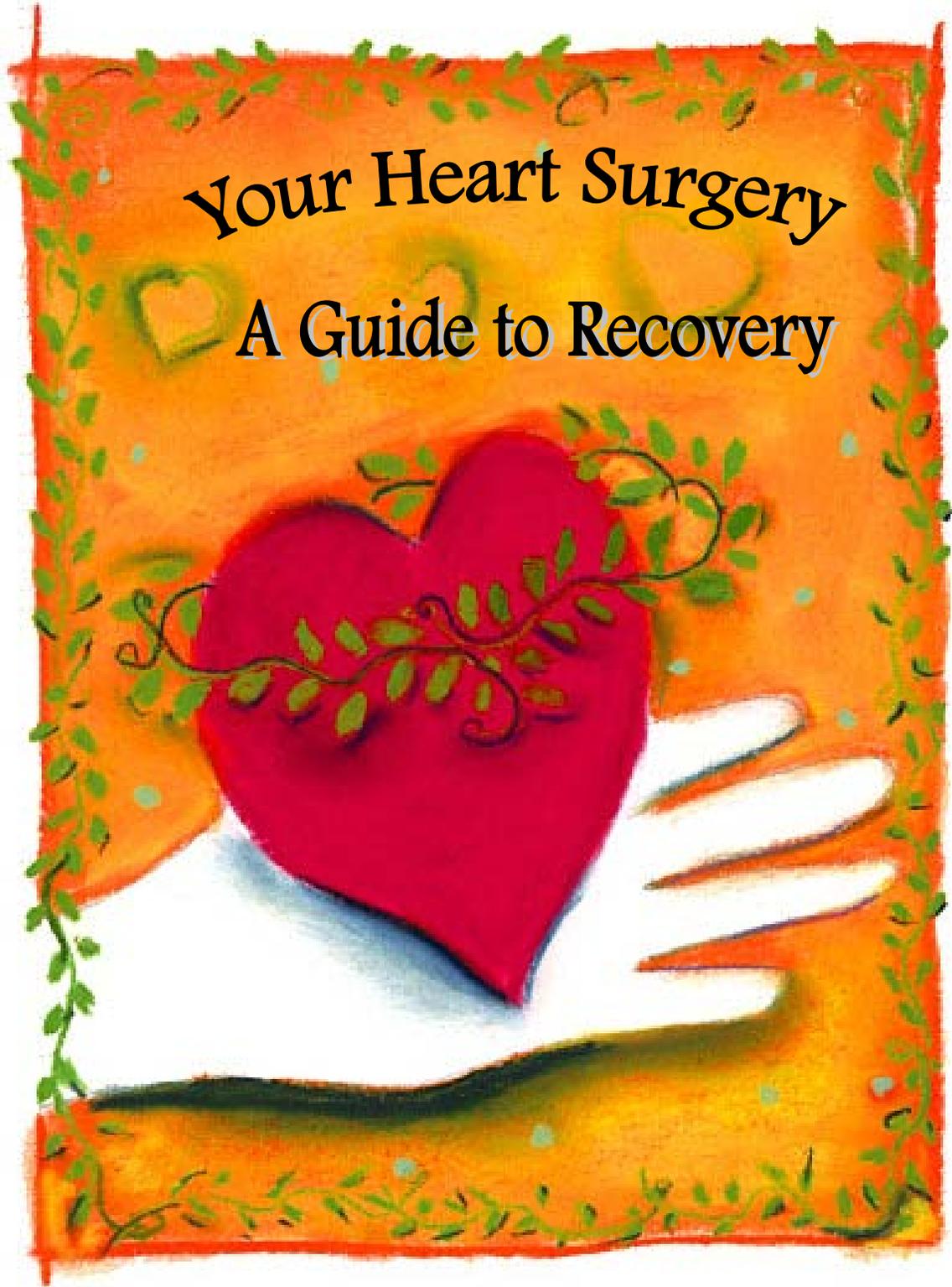


# Your Heart Surgery

## A Guide to Recovery



**Mount Sinai**  
MEDICAL CENTER

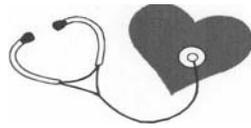
**Created and Written by:**

**Shay Lamelas, ARNP**



**Mount Sinai**  
MEDICAL CENTER

# All You Need to Know About



# HEART SURGERY ...

Written by:  
Shay Lamelas, ARNP,

# All About Your Surgeon ...

## Dr . Joseph Lamelas Chief of Cardiac Surgery

**Dr. Joseph Lamelas** is the Chief of Cardiac Surgery at Mount Sinai Medical Center. Dr Lamelas has been in practice in the South Florida area since 1990. He has performed over *8,000* open heart surgeries. His success comes from his ability to provide his patients with every surgical technique and option available in the field of cardiac surgery. Dr. Lamelas has been recognized as one of the top heart surgeons in South Florida. He has received multiple awards including the prestigious *Carlos J. Finlay* medal and has held the title of the president of the Cuban Surgical Society. He has participated in both national and international conferences. He serves as a proctor, teaching his colleagues advanced valve implantation techniques as well as pioneering new operative procedures nationally and internationally. He hosts a well-attended monthly minimally invasive valve symposium for cardiac surgeons from all over the world. He has pioneered techniques in minimally invasive valve surgery that has received worldwide recognition.

Dr. Lamelas' training in Cardiothoracic surgery at the State University of New York has been fundamental to the development of his skills and practice. He is involved in the latest innovative techniques in Cardiothoracic surgery, for example, beating heart surgery minimally invasive surgery robotics, and state of the art valve repairs and replacements.

Dr. Lamelas is the only Cardiothoracic surgeon board certified in Cardiac surgery, Thoracic surgery and Surgical Critical Care in South Florida. He has consistently had one of the lowest morbidities and mortalities in the state of Florida as well as the United States. His dedication to the field of Cardiothoracic surgery has made him a pillar in the community. He is Assistant Professor of Surgery at Florida International University. He was recently appointed to the faculty of New York's Columbia University as Professor of Surgery.

## Associates

**Dr. Roy Williams** joined Dr. Lamelas in 1996. He also received his training in Cardiothoracic surgery at the State University of New York. He also did an additional year of designated specialized thoracic surgical training. Dr. Williams has a decade of experience of utilizing minimally invasive techniques in aggressive early diagnosis and treatment of lung cancer. He is currently at the forefront of advancing robotic platform thoracic surgery utilizing the Intuitive Da Vinci Robotic System. He has been an asset to the practice and instrumental to its development.

**Dr. Angelo LaPietra** joined Dr. Lamelas in 2004. He trained in New York at New York University. His special interests include Minimally Invasive surgery, Thoracic Aorta Aneurysm surgery and implantation and explantation of electronic cardiac devices such as pacemakers and defibrillators.

# All About Your Open Heart Team ...

There will be many people involved in your care to ensure a good recovery:

Cardiac Surgeon  
Primary/Consulting Physicians  
Critical Care Physician Nurse  
Practitioner Nurses  
Respiratory Therapists  
Physical Therapists  
Case Management

## Keeping All the Information in Order ...

Date of Surgery: \_\_\_\_\_

Type of Surgery: \_\_\_\_\_

Hospital Phone Number: 305-674-2121

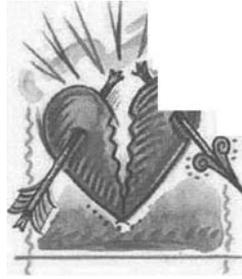
Room Number: \_\_\_\_\_

Room Phone Number: \_\_\_\_\_

Office Number: 305-674-2780  
Fax: 305-674-2865  
Mount Sinai Medical Center  
4300 Alton (Greenspan Pavilion)  
Suite 2110  
Miami Beach, FL 33140

1.

# How did you get here??



## **Coronary Artery Disease**

Coronary Artery Disease is a condition in which the arteries that supply the heart with oxygen and blood become blocked. This can lead to a heart attack. Over 14 million people each year suffer from a heart attack and over 250,000 people do not survive. Your Cardiac Surgeon or his Nurse Practitioner will explain your specific problem in detail.

## **Causes of Coronary Artery Disease**

There are many different causes for coronary artery disease. Some causes of CAD are out of your control while others can be prevented.

1. Atherosclerosis (plaque and cholesterol build-up)
2. Hereditary
3. Smoking
4. Overweight
5. Diabetes
6. Lack of activity

## **Symptoms of Coronary Artery Disease**

Everyone is different; however, there are some common complaints when you have coronary artery disease:

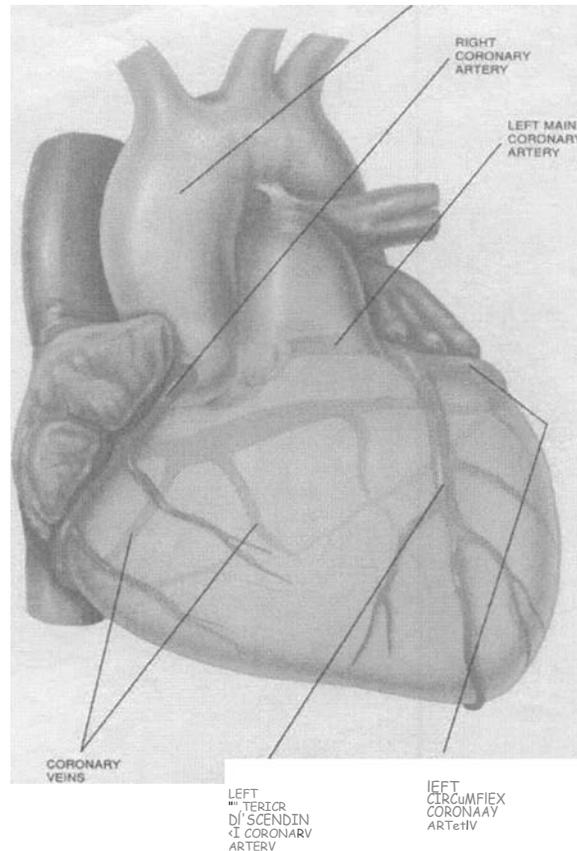
2. Chest pain (pressure, tightness, and pain are all equivalent)
3. Jaw tightness
4. Arm pain (Usually with the chest pain)
5. Can't catch your breath
6. Back pain
7. Extremely tired / fatigue

## **Treatment of Coronary Artery Disease**

There are different treatments offered for different stages and severity of your coronary artery disease. Your Cardiologist and Surgeon will review all the options to determine what is best for you.

During surgery, your surgeon will use other arteries and veins in your body to make bridges over your blocked arteries.

8.



## **Your Coronary Arteries...**

### **Heart Valve Disease**

You have four valves in your heart. These valves act like doors letting the blood in and out of your heart. There are two types of problems that can occur: Blockage (Stenosis) or Leaking (Insufficiency):

When you have a blocked valve in your heart, the valve is not completely opening, preventing the blood to pass through this valve easily.

When you have a leaking valve in your heart, the valve does not close completely (the blood leaks backwards through your "valve", causing an overload of blood and fluid in your heart and lungs).

### **Causes of Valve Disease**

The most common causes of valve disease are Rheumatic Fever, calcium build-up, infection, congenital, degeneration, and lack of blood flow to the valves.

### **Symptoms of Valve Disease**

Everyone is different; however there are some common complaints people have with valve disease:

1. Shortness of breath (at rest or with exercise)
2. Chest discomfort
3. Poor exercise tolerance (fatigue)

## Treatment of Valve Disease

There are many factors that are involved in picking the right valve for you. Your surgeon will decide which valve is best suited for your lifestyle and your general condition.

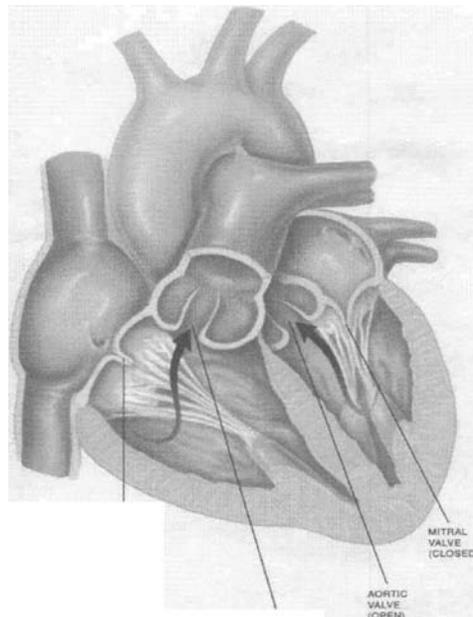
### Types of Valves and Their Care After Surgery

**Metal Valves:** Metal valves have the longest durability. They last 20 years or longer, however their care after surgery requires more maintenance. You have to be on a blood thinner, Coumadin, for the rest of your life. If you are injured, you have a greater risk of bleeding. You cannot take Coumadin if you want to get pregnant. You are not allowed to drink any type of alcohol because alcohol and Coumadin react with each other. There are also dietary restrictions with Coumadin. (Certain foods, especially those high in vitamin K, like green vegetables, block the effect of Coumadin).

**Bioprosthetic Valves:** These valves come from either cows or pigs. They last approximately 10 to 15 years. They require only one baby aspirin a day to help prevent clotting of the valves. If you have a mitral valve replacement, you will be required to take coumadin for 3 months. Patients who undergo a mitral valve repair maybe be placed on Plavix and aspirin instead of coumadin. This will be at your surgeon's discretion.

**Human Valves:** Human valves are from cadavers and last about the same amount of time as Bioprosthetic valves. Your body does not reject this valve like an organ transplant because the valve is not living. After surgery you need to take an aspirin a day. In addition, An anti-inflammatory (Indocin) is required for 3 months.

Within each of these categories there are also options. These options will be discussed with you by your surgeon. He will help you decide which will be the best for you.



Heart Valves...

# Preparing for Surgery ...



**Know the risks:** Your Surgeon and Nurse: Practitioner will discuss with you and your family the risks and complications that can occur from surgery:

**Bleeding**

**Abnormal Heart**

**Beats**

**Stroke**

**Wound Infection**

**Kidney, lung, or other organ  
problems**

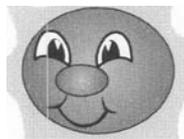
**Death**

If you or family has further questions, please do not be afraid to ask. We do not expect any complications to occur, but you must be informed. The risks of the operation are usually higher in those patients who have other problems before surgery (ie: prior strokes, kidney or liver failure, lung disease, bleeding problems, etc.)

## **Preparing for Surgery:**

- \*Stop taking aspirin, Plavix, and coumadin 5-10 days prior to surgery (Use Tylenol for muscle or arthritic pain or headaches)
- \*Stop smoking (higher risk for breathing complications)
- \*Bring a list of your medications to the hospital the day of surgery (ask your surgeon or nurse practitioner which pills to take the day of surgery)
- \*Take care of all bills and legal papers so you are not stressed during your recovery

# The Day Before Surgery ...



- \*Think Positive
- \*You may eat regular meals
- \*Do not eat or drink after midnight (12am)
- \*Take a shower with antibacterial soap before going to sleep (provided by the office)
- \*You also be given Bactroban nasal ointment to start 2 days prior to surgery
- \*Have a good night's rest (although most people do not!)



Proper preparation of the skin is important in reducing the risk of infection. This procedure does not replace the skin prep that is completed in the OR just before the operation. The pre-operative scrub may include a shower or local application of a skin antiseptic (Hibiclens) to the planned surgical site. Two separate scrubs should be completed, the night before surgery and the morning of surgery. Do not remove hair.

**Gather the supplies:**

- Antiseptic solution such as Hibiclens (provided by the office)
- Clean wash cloth and towel
- Clean pajamas or clothes
- Clean wash basin

**Prepare the skin:**

- Use a clean wet wash cloth to spread the antiseptic solution over the planned surgical site. Extend the antiseptic solution for at least 12 inches from the site(s) where the incision will be placed.
- Scrub the area for 2-3 minutes using a circular motion. Start at the expected incision site and work out from there. Avoid contaminating the area you have already scrubbed. Apply some friction during the scrub, but avoid scrubbing too hard. Be sure to scrub any crevices or skin folds carefully.
- Use Warm tap water to rinse off the antiseptic solution
- Dress in freshly laundered pajamas or clothes

**Preparing for a shower:**

- Wash and rinse the hair using normal shampoo. Make sure to completely rinse the shampoo from the hair and body.
- Apply the antiseptic solution to a clean wet wash cloth and lather the entire body from the neck down. Never use the antiseptic solution near the eyes or directly on delicate areas of the body. Turn off the water or move away from the water spray to avoid rinsing the antiseptic solution. Wash the body applying some friction, but avoid scrubbing too hard. Be sure to scrub any crevices or skin folds carefully. Focus on the areas where the incision (s) will be located and scrub for about 3 minutes.
- Once you have completed the scrub, rinse the Hibiclens solution off the body.
- Do not use wash with regular soap after you have used Hibiclens.
- Dry off with a clean towel and dress in freshly laundered pajamas and clothes.
- Do not apply any powdered, deodorants or lotions.
- If only a bathtub is available, use Hibiclens instead of soap. After scrubbing, stand up in the tub and rinse off with fresh tap water.

## WHAT YOU NEED TO KNOW ABOUT PREVENTING SURGICAL SITE INFECTIONS A Fact Sheet for Patients and Their Families

### What is a Surgical Site Infection (SSI)?

A surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place. Most patients who have surgery do not develop an infection. However, infections develop in about 1 to 3 out of every 100 patients who have surgery. Some of the common symptoms of a surgical site infection are:

- Redness and pain around the area where you had surgery
- Drainage of cloudy fluid from your surgical wound
- Fever

### Can SSIs be treated?

Yes. Most surgical site infections can be treated with antibiotics. The antibiotic given to you depends on the bacteria (germs) causing the infection. Sometimes patients with SSIs may need a minor procedure to drain the wound or possibly another surgery to treat the infection. In addition, some patients may require follow up with home health nursing care.

### What are some of the things that hospitals are doing to prevent SSIs?

To prevent SSIs, doctors, nurses, and other health care providers:

- Clean their hands and arms up to their elbows with an antiseptic agent just before the surgery
- Clean their hands with soap and water or an alcohol-based hand sanitizer before and after caring for each patient.
- May remove some of your hair immediately before your surgery using electric clippers if the hair is in the same area where the procedure will occur. They should not shave you with a razor.
- Wear special hair covers, masks, gowns, and gloves during surgery to keep the surgery area clean.
- Give you antibiotics before your surgery starts. In most cases, you should get antibiotics within 60 minutes before the surgery start and the antibiotics should be stopped within 24 hours after surgery.
- Clean the skin at the site of your surgery with a special soap that kills germs.

### What can I do to help prevent SSIs?

Before your surgery:

- Tell your doctor about other medical problems you may have. Health problems such as allergies, diabetes, and obesity could affect your surgery and your treatment.
- Quit smoking. Patients who smoke get more infections. Talk to your doctor about how you can quit before your surgery.
- Do not shave near where you will have surgery. Shaving with a razor can irritate your skin and make it easier to develop an infection.

### At the time of your surgery:

- Speak up if someone tries to shave you with a razor before surgery. Ask why you need to be shaved and talk with your surgeon if you have any concerns.
- Ask if you will get antibiotics before surgery.

### After your surgery:

- Make sure that your healthcare providers clean their hands before examining you, either with soap and water or an alcohol-based hand sanitizer.
- Family and friends who visit you should not touch the surgical wound or dressings.
- Family and friends should clean their hands with soap and water or an alcohol-based hand sanitizer before and after visiting you. If you do not see them clean their hands, ask them to clean their hands.

### What do I need to do when I go home from the hospital?

- Before you go home, your doctor or nurse should explain everything you need to know about taking care of your wound. Make sure you understand how to care for your wound before you leave the hospital.
- Always clean your hands before and after caring for your wound.
- Before you go home, make sure you know who to contact if you have questions or problems after you get home.
- If you have any symptoms of an infection, such as redness and pain at the surgery site, drainage, or fever, call your doctor immediately. If you have additional questions, please ask your doctor or nurse. If you do not see your providers clean their hands, please ask them to do so.

## ACKNOWLEDGEMENT / RECEIPT OF EDUCATIONAL INFORMATION PACKET: Preventing Surgical Site Infection

I acknowledge that I have been educated on information contained in the "FACT SHEET FOR PATIENTS AND THEIR FAMILY MEMBERS". The education was provided before surgery was performed. The information includes facts about preventing surgical site infection. If the surgery was performed emergently, education was provided as soon as appropriate post procedure.

\_\_\_\_\_  
Patient

\_\_\_\_\_  
Date

\_\_\_\_\_  
Surrogate or Authorized Signer

\_\_\_\_\_  
Date

\_\_\_\_\_  
Nursing Signature

\_\_\_\_\_  
Date

||||-|||||

# The Day of Surgery...

- \*If you are coming from home, you need to be at the hospital 2-3 hours before surgery (Outpatient admitting will tell you the time)
- \*Park in the designated patient/visitor parking area and proceed to the waiting room in the main building or where you were instructed to go. A nurse will come get you at this location.
- \*Remove all valuables and give them to your family (jewelry, dentures, etc.)
- \*You will be informed of progress during surgery by the OR nurse
- \*After the surgery, the surgeon will look for your family in the waiting room to inform them on the results of the surgery. You will be going to the Intensive Care Unit which specializes in open heart surgery.

## Standard Visiting hours

Please understand we do not want to keep your family and friends from visiting you, but while you are in the Intensive Care Unit your recovery is our main concern and you need rest!

Please select one person to be the spokesperson for information on your status



## Waking up after surgery...



**Anesthesia:** You need general anesthesia for the surgery. When you wake up in the ICU, you may feel confused and scared. You will have a tube in your throat for breathing. Try to relax and breathe slowly and deeply. You will not be able to talk until the tube is removed. The tube will be removed as soon as you are breathing on your own. Your throat may be sore for a couple of days after the breathing tube is removed.

**Intravenous (IV) Lines and Tubes:** You will have multiple IV lines inserted before surgery so that we can monitor your condition during and after surgery. You will have an IV in your neck and one in your arm to monitor fluid intake and blood pressure. You will also have tubes in your chest to drain excess fluid after surgery. You will have a catheter

in your bladder as well. All the tubes and lines will be removed 1 to 3 days after surgery, as long as everything is progressing well. If the tubes are left longer, this does not mean that you are not doing well. There is always a reason for everything that is done.

**Temporary Pacemaker Wires:** You will have small blue wires in your chest after surgery. These are hooked up to a pacemaker. During surgery, the manipulation of your heart can affect your heart rate and rhythm, and these wires will help normalize this. If your heart rate and rhythm are normal, the wires will be removed 3-5 days after surgery.

**Pain Management:** You will be given medication for your pain through your IV until the breathing tube is removed. Once you are able to drink fluid, you will be given pills for pain control. If you are having pain, you must report this to the nurse!!! Don't be afraid to ask your nurse for pain medication. You can have pain medication every 4 hours but you must ask for it (It will not be given automatically).

**Activity:** After you wake up from surgery, you will be in bed for the rest of the day. Your nurse will help reposition you for comfort. To help your circulation, you need to move your feet up and down (like your waving to your nurse "hello" with your feet).

**Respiratory Therapy:** One problem seen after surgery is secretions blocking the respiratory tract which can lead to pneumonia. To prevent such a complication, you will receive respiratory therapy around the clock. A therapist will teach you how to take deep breaths and cough. You need to do this every hour. When you cough you must hug a pillow to support your incision. You will also be taught how to use a little blue machine called an Incentive Spirometer. You must do the breathing exercises 10 times per hour or more. You should inhale deeply, hold the air in your lungs for a few seconds, and then slowly exhale. The therapist will also give you aerosol treatments every 4 hours. You will have to wear a nasal cannula (provides you oxygen) for 2 to 3 days until you have enough oxygen in your body.

**Diet:** After you wake up from surgery, you will be extremely thirsty. This is normal, however, you should not drink a lot of fluid the first few days. A good suggestion is to have ice chips to keep your mouth moist. You can advance your diet to solid food later in the day or the next day.

## The Days After Surgery...

The first day after surgery will be the most exciting and challenging day for you. All the lines and tubes will be removed and you will be getting out of bed. If all things go well you will be moving to the telemetry floor to start cardiac rehabilitation (Some patients will require the lines and tubes for one or two extra days - this does not mean there is a problem).

The surgery part was easy for you because you were sleeping and everyone else was working. Now comes the hard part .. you will be doing the work! There are many activities you will need to do to prevent complications and be able to return to a normal routine.

**Exercise:**

A physical therapist will work with you each day while you are in the hospital. They will teach you exercises to do before and after you walk. Once you have gone home, you will need to continue these exercises and should walk 4 times a day for 10-15 minutes. The A A physical therapist will give you a routine to follow at home. While sitting in a chair or lying in bed, you should continue moving your feet up and down to prevent blood clots in your leg. You need to be in the chair most of the day . you may have difficulty sleeping after surgery because of the anesthesia, medications, and being in the hospital. Staying in a chair during the day is good for your lungs, and enables you to sleep better at night. Some patients may even become confused and aggressive after surgery. ICU psychosis is not unusual and will go away after you move out of the unit or are at home.

**Respiratory Therapy:** Continue working with your breathing exercises: Incentive Spirometer, coughing, deep breathing, and aerosol treatments.

**Pain Management:**

It is normal to have pain after surgery. You may have pain in your incisions or in your back muscles. You can place a heating pad on your back or leg incisions to relieve some of the pain. You can take your pain medication every 4 hours, but you must ask your nurse for the medicine.

**Diet:**

You will not have much of an appetite for 2-4 weeks. When you are at home, it is better to snack during the day instead of eating three big meals. While in the hospital, you need to eat and drink what you can tolerate when they bring you a tray. You can save things off of your tray for snacking later. This is not the time to begin a diet.

**Bathing:** We recommend for the next 4 weeks to take showers only. Do not sit or soak in a tub of water (this includes pools and saunas). You can bathe with soap (without perfumes) and water. After bathing, you can tap dry your incisions.

**Preparing to go home:** Normally 3 to 5 days after surgery you will be ready to go home. You may not feel back to normal, but you only need more time and exercise to return to your normal activities. We will send you home with new prescriptions and pain medication. If you have any questions about your medications, please ask! Only take the medications that are prescribed to you upon discharge. **DO NOT TAKE** the medicines you were taking before surgery unless they are re-prescribed to you by your doctor. We will send a nurse to your house for two weeks to check your incisions, blood pressure, and your overall progress.

Changing technology...improved cosmesis...quicker recovery

## Minimally Invasive Surgery

In today's rapidly advancing technological world, minimally invasive surgery is allowing patient's to have surgery before permanent heart damage occurs, enabling patient's a faster recovery returning to normal activities much sooner, and having a much smaller incision for a better self image.

### What is minimally invasive surgery?

Minimally invasive surgery is for valve repair and replacement, removing tumors in the heart, repairing holes in the heart, and correcting atrial fibrillation (abnormal heart beats). This type of surgery is being performed for single vessel coronary artery disease(LAD). The incision is 5 centimeters and located on the right side of the chest. The breast bone (sternum) is not cut. The heart lung machine is connected to the patient through the femoral artery and vein.

### Who can have minimally invasive surgery?

A patient with:

1. Leaking (regurgitant) or blocked (stenotic) aortic, mitral, or tricuspid valve.
2. ASD
3. Atrial Myxoma
4. Atrial Fibrillation

### Who can not have this surgery?

1. Age nor weight are contraindications
2. Severely calcified Aorta
3. Previous surgery in the right chest

### What are the advantages of Minimally Invasive Surgery?

1. More rapid recovery
  - a. Decreased time on the breathing machine
  - b. Decreased stay in ICU
  - c. Decreased blood transfusions
  - d. Decreased time in the hospital
  - e. Decreased recovery time to return back to normal activities(2-3 weeks versus 6-8 weeks)
  - f. Decreased infection rate
  - g. Better cosmetic appearance
  - h. Results are better than the national average compared to the open sternotomy valve procedures

### What are the disadvantages?

1. Technically challenging for the surgeon (Your surgeon should be very experienced)

### **What are the common complications?**

1. Higher incidence of pleural effusions (fluid on the right lung). This is treated with anti-inflammatories and if needed can be drained as an outpatient or in the hospital.
2. Groin Seroma (accumulation of lymphatic fluid) where the heart lung machines catheters are placed. Seromas are treated with dry heat. If this does not help, the seroma can be drained in the office or may even require open drainage by a vascular surgeon.
3. Other complications may occur with the same or lower risk as seen in the open sternotomy cases.
4. Pain is very subjective. Some patients state this surgery is less painful and others say they had a lot pain. We can not predict your expected level of pain but most patients have little to no pain...only muscle soreness.

# Going Home...

**DO NOT LIFT ANYTHING OVER 20 POUNDS FOR 6 WEEKS!!!**



Exercises: Going home is not the end of your recovery journey. You must continue your walking and breathing exercises as well as trying to get back to your old routine. The only limitation you have is to not lift anything over 20 pounds for 6 weeks. If you had a minimally invasive procedure, you have less physical limitations after surgery. You have the same limitations for 2 weeks versus 6 weeks. This extra time is required for your chest bone to heal.

## Patient Exercise Guidelines

### Daily Activities:

- Walk around the house 2-4 times a day
- Stretching exercises 2-4 times a day
- Walking for 5-30 minutes, progressing toward your exercise goals

### Remember your restrictions:

- No pushing, pulling, or lifting more than 20 pounds
- No heavy household chores: mopping, vacuuming, mowing the lawn, etc
- No driving for 2 to 4 weeks after discharge (Do not drive while on pain medication)

### Getting Ready to walk .... you need to:

- Walk when rested
- Do not walk in the middle of the day (too hot)
- Wear loose fitting clothes
- Check your heart rate
- Complete your "Warm up" exercises before walking

### After you walk:

- Cool down exercises
- Stretching exercises

### **STOP EXERCISING** If you feel:

- Chest pain
- Short of breath
- Dizzy
- Nauseated

**Incision Care:** The first few days after surgery, you will have a special dressing over your incisions to keep them clean. Once you are ready to go home, you do not need to put any creams or ointments on your incisions unless otherwise instructed by your physician. A home health nurse will remove the dressing as the date written on the dressing. Minimally invasive incisions will not have a dressing because you have a special glue-like covering that will peel away with time. After your dressing is removed, you need to keep them dry and open to air. If any of your incisions are draining, please give us a call. Do not expose your wounds to direct sunlight because they may turn purple in color and not heal perfectly.

**Seroma:** A seroma is a collection of non- infected fluid. Seromas occur near or on the leg incisions usually in the groin area. You need to call the office if you have a seroma. The treatment is very simple. We can drain the area in the office under local anesthetic and if it reoccurs we can place a tiny drain for about a week. If the seroma is small, we just apply heat and wait. Sometimes they go away on its own in a month or two.

**Incision Pain:** You may feel a grabbing sensation in the center of your chest, numbness over the chest, or pins and needles sensation. You may also have pain and numbness in the shoulder, arms, and hands. These are all normal. These sensations last about 2-3 months.

**Diet:** The first 4 weeks after surgery you should not consider starting a diet. Your body needs calories and nutrition to heal. We recommend that you restrict your fluids (water, juice, soft drinks) to 1500cc a day. This is approximately 6 glasses of fluid in one day. Your heart and lungs are a little weak after surgery and cannot handle too much liquid. You should not drink caffeine for four weeks after discharge. You can have coffee and coke without caffeine. You may have one glass of wine, beer, or one mixed drink a day. Do not drink alcoholic beverages within one hour of taking your medications.

You do not have to follow any specific diet after surgery unless you have other medical conditions (Diabetes). We recommend you eat a well balanced diet including:

Poultry                      Lean Meat  
Low Fat Milk and Dairy products  
Fruits                      Vegetables  
High Fiber

## **Sodium**

Sodium is a mineral that is necessary in our diet, however most of us eat too much. When the body has too much sodium, it will retain more fluid and cause your heart and lungs unneeded stress. Most foods have sodium (especially processed food). We recommend you do not add extra salt to your food. You may use a salt substitute or other spices to enhance your food's flavor. Here is a list of helpful ways to decrease your salt intake:

1. No salt shaker on the table
2. Do not cook with salt, use other spices
3. Avoid salty food: potato chips, olives, nuts (you can eat these items if they say "low salt" or "no salt")
4. Avoid salty meats: bacon, hot dogs, lunch meats, smoked meats

5. Avoid processed food (frozen food)
6. Limit dairy products (2 cups of low fat or skim milk per day)
7. AVOID CHEESE

## Cholesterol

Cholesterol is also a normal part of our diet but in excess can raise the levels in our blood leading to further heart damage. Most all cholesterol is found in animal products: meat and dairy. Limit the amount of these products in your diet.

## Fats

There are two types of fat: Saturated and Unsaturated. Saturated is the bad fat because it increases the level of cholesterol in your blood. Unsaturated fat is found in vegetables and plants and does not affect cholesterol levels as much.

## Helpful Hints

1. Eat low fat foods
2. Eat baked or broiled meats ... not fried
3. Limit amount of eggs (can switch for egg whites)
4. Limit amount of butter, mayonnaise, sauces, ketchup (High sodium)
5. Limit snack foods (pre-prepared grocery store snacks)

We do not recommend that you stop enjoying food; however, with moderation and a few changes, you can enjoy food and stay healthy!!!



# TAKING Coumadin?

## Let's Talk!!

**Coumadin** (The generic: Warfarin) is an anticoagulant which makes your blood thin. There are many reasons people are started on this medication, for example:

**Metal Heart Valve**

Atrial Fibrillation (Irregular heart rate)

**Congestive Heart failure** (Weak heart) **Abnormal clotting**

**Mitral replacement with a tissue valve** (first 3 months only...if you are not in atrial fibrillation)

The amount of coumadin you need is determined by blood tests. These tests are extremely important because too little or too much coumadin can be life threatening. You will need to be followed by your physician for blood tests. They will change your coumadin if necessary after discharge. Anyone who gives you medical care (Doctor, Nurse, or Dentist) needs to know you are taking this medication.

Side effects (If any of these occur, you need to notify your doctor immediately):

**Headache**

**Sudden Weakness**

**Nosebleeds**

**Bleeding gums**

**Throwing up blood**

**Blood in your stool**

**Abnormal bruising**

**Dark urine**

Many different things can affect the Coumadin in your blood, for example: being sick, medications, and diet. You need to communicate to your doctor that you are taking coumadin before starting a new medication.

## **Foods that can affect Coumadin:**

Mayonnaise	Cabbage
Oil (Canola, Soybean only)	Collard Greens
Broccoli	Parsley
Brussels sprouts	Mustard Greens
Turnip Greens	Watercress
Avocado	Asparagus
<i>Any type of alcohol!!</i>	

### **Hints:**

- \*Take your Coumadin at the same time each day
- \*Do not miss your routine blood tests
- \*Tell your doctor of any changes in diet or medication use
- \*Watch for signs of bleeding
- \*If you miss a dose do not take 2 pills!! Wait until the next dose
- \*Do not take Coumadin if you are pregnant. Notify your doctor if you become pregnant while taking Coumadin (will affect the baby)
- \*It takes 3-5 days for Coumadin to be out of your system
- \* Avoid contact sports or other activity that may result in injury

**\*\*If you have not had a blood test within 5 days after leaving the hospital, you must call the office immediately!!!\*\***

# YOU ARE GOING HOME!!

Now you have all the ingredients to recover on your own at home ...it's up to you.

The following items summarize the most important things you need to know ...

1. Remove dressings from incisions and leave them open to air unless they are draining. The leg and chest tube incisions might drain for up to a week. The sternal (chest) incision should NEVER drain. Please call the office if you notice any changes. The chest incision has a special dressing that should be removed by the home health care nurse 7 days after it was put on in the hospital. You should have a date written in the dressing.
2. Use gauze on incisions if draining (the large incision in the middle of your chest should never drain, if it does call us immediately! The incisions on your leg or abdomen may drain for 1-2 weeks, that is OK as long as the drainage is clear, otherwise call us)
3. When using gauze, use very little tape
4. May shower daily with non-perfume soap and water
5. Do not sit or soak in water (ex: pools, hot tubs, or bathtub)
6. No solutions, ointments, or creams should be used on the incisions unless directed by the surgeon
7. Knee high stockings should be worn during the day only for two weeks after discharge. Women should wear a bra for 4 weeks at all times (without under wire, only cotton)
8. Breathing exercises with your incentive spirometer should be done 10 times or more every 2 hours for 2 weeks after discharge.
9. Walk 4 times a day for at least 15 minutes, increasing the amount of time you walk each week ex: 4 times a day for 15 min the first week then 4 times a day for 20 minutes the 2nd week; you can walk up and down stairs slowly using the handrails for support
10. Keep your legs elevated while sitting or lying to help the swelling in your legs
11. Do not lift, push, or pull anything over 20 pounds for 6 weeks (2 weeks for minimally invasive procedure)
12. No driving for 4 weeks
13. Avoid direct sunlight on your incisions
14. Resume full activity without restrictions (except lifting), Listen to your body
15. You can have a glass of wine or beer 2-3 times a week with food (do not drink 1 hour before or after taking you medication)
16. Do not add salt to your diet; limit the amount of fried or high fat foods
17. Call Dr. Lamelas' office when you get home from the hospital and make an appointment for 2 weeks (305-674-2780). Call all your doctors and clinic for an appointment also. Take a list of your medications with you

## CALL THE OFFICE IMMEDIATELY IF:

1. Fever greater than 101.0/ 38.4 C
2. Red, swollen, or open incisions with white drainage

GOOD LUCK

SINCERELY,  
Shay Lamelas, ARNP  
CARDIAC SURGERY