

BEFORE & AFTER IMPLANT-BASED BREAST RECONSTRUCTION SURGERY: ENHANCED RECOVERY

This booklet will:

- Help you understand and prepare for your surgery
- Explain how you will play an active part in your recovery

What Is Enhanced Recovery?

When you are admitted to the hospital for your breast reconstruction surgery, you will be part of a program called Enhanced Recovery After Surgery (ERAS®).

The goal of this program is to help you:

- Recover more quickly,
- Experience less pain, and
- Decrease your risk of complications such as blood clot or serious infection.

Research shows that you will recover faster if you do the things explained in this booklet. There are instructions about eating and drinking, physical activity, and controlling your pain. These things will help you to feel better faster and get back home sooner.

Please bring this booklet with you on the day of surgery. Use it as a guide during your hospital stay. Hospital staff may refer to it as you recover, and will review it with you when you go home.

Having surgery can be stressful for patients and their families. The good news is that you are not alone. We will support you each step of the way. Please ask us at any time if you have questions about your care.

DATE OF SURGERY

TIME TO ARRIVE AT THE HOSPITAL:

Breast Reconstruction Surgery

After a mastectomy, some women choose to have surgery to remake their breast. This type of surgery is called breast reconstruction.

Breast reconstructive surgery is a highly personal choice. There are many options available for both the type of reconstruction as well as the timing of the surgery. The available options will depend on factors such as your personal preference, age, lifestyle, current and future treatment needs, health status, past surgeries, and body shape. There is no one “best” type of reconstruction for everyone. Each person will have her own “best” reconstruction - the option chosen after consultation with her doctors and perhaps loved ones also.

Please feel free to ask your care providers any questions you have during the time you are planning, preparing, and recovering from surgery.

BEFORE YOUR SURGERY

Preparing for Surgery

1. MEDICAL CLEARANCE

You will need to arrange an appointment with your primary care physician (PCP) within 30 days prior to your surgery date for medical clearance. Depending on your health history, you may need to see other specialists prior to surgery also, such as an endocrinologist (diabetes) or cardiologist (heart disease or certain medications).

2. BE ACTIVE

Exercise will help your body to be as fit as possible and keep your weight under control. If you are already active, keep it up. If not, please try to begin exercising. Even a minimum of 15 minutes per day is beneficial. This does not need to be strenuous.

3. STOP SMOKING!!

If you smoke, try to stop at least 6 weeks before your surgery. Smoking greatly increases the risk of infection, wound healing problems, and the need for additional surgery to treat complications. It also increases the risk of lung problems and other surgical complications. Your PCP can help you stop smoking by prescribing medications if necessary.

4. RESTRICT ALCOHOL

Do not drink alcohol 24 hours before surgery. Alcohol can interact with some medications. If you need help decreasing your alcohol use before surgery, let us know.

5. PLAN AHEAD

You may need help with meals, laundry, bathing, cleaning, and caring for others when you go home from the hospital. Stock your fridge and freezer with food that is easy to reheat.

Oftentimes patients will have one or more drains placed during surgery that will need to remain in for about two weeks. See pages 12-14 of this booklet for information about what to expect after you arrive home from the hospital, including how to take care of the drains. In addition, nurses will provide teaching during your hospital stay.

Make plans with your family and friends so you will have the help you need.

6. **ARRANGE TRANSPORTATION**

The goal is for you to go home from the hospital on the day after surgery around 11 am. Please arrange for a ride.

7. **CANCELLING SURGERY**

If you get sick, please call the Breast Surgery clinic as soon as possible at 847-570-1700.

Medications - General Guidelines

1. Multivitamins, herbs, green tea, and over-the-counter supplements - **Stop 10 days before surgery.**
2. If you are taking Aspirin 325mg - **Stop 10 days before surgery** and begin taking 81mg
3. **Aspirin 81mg- Continue to take prior to and on the day of surgery**
4. Non-steroidal anti-inflammatory drugs, also known as NSAIDS, such as Advil, Aleve, Motrin, ibuprofen, Mobic etc. - **Stop 10 days before surgery.**
5. Tylenol (acetaminophen) - Can be taken up until the night before surgery.
6. Tamoxifen (or other anti-estrogen medication) - Ask your oncologist whether you should discontinue this medication.
7. Seizure medication - Take this on the day of surgery with a sip of water.
8. Blood Pressure medication - Take as directed until the day before surgery. Most should also be taken on the day of surgery with a small sip of water. All blood pressure medications should be discussed with your primary care physician or cardiologist before surgery.

On the day of surgery DO NOT take the following cardiac medications:

- a. **Diuretic:** also known as a water pill, such as furosemide (AKA Lasix), hydrochlorothiazide (AKA HCTZ), bumetanide (AKA Bumex), and torsemide (AKA Demedex).
- b. **ACE inhibitor:** such as enalapril (AKA Vasotec); lisinopril (AKA Zestril or Prinivil); ramipril (AKA Altace); and others too numerous to list here.
- c. **Angiotensin receptor blocker (ARB):** such as Losartan (AKA Cozaar); Candesartan, (AKA Atacand); Valsartan (AKA Diovan); Irbesartan (AKA Avapro); Olmesartan (AKA Benicar), and others too numerous to list here.

9. **Blood thinning, anticoagulant, and antiplatelet medications will need to be modified or stopped before surgery. Follow the guidance of your PCP or Cardiologist if you are taking these or other similar medications:**

*Heparin	*Lovenox (enoxaparin)	*Arixtra (fondaparinux)
*Fragmin (dalteparin)	*Pradaxa (dabigatran)	*Xarelto (rivaroxaban)
*Eliquis (apixaban)	*Coumadin (warfarin)	*Plavix (clopidogrel)
*Effient (prasugrel)	*Brilinta (ticagrelor)	*Savaysa (edoxaban)

For further questions regarding medications, please contact the office at 847-504-2300.

Patients with Diabetes

If you have diabetes, plan ahead to see your **primary care physician and/or endocrinologist** before surgery to confirm how to handle your diabetic medications. Bring this booklet to the visit to ensure the appropriate tests, as well as review and discussion of medication, are completed prior to surgery.

You will need to have a **Hemoglobin A1C blood test** as part of your pre-operative testing. A result that is higher than normal may indicate that we need to cancel or postpone your reconstructive surgery.

DO NOT TAKE ANY ORAL DIABETES MEDICATIONS FOR 2 DAYS prior to your operation.

Pre-operative Clearance

1. It is your responsibility to call and schedule an appointment with your Primary Care Provider (PCP). You will need your PCP to perform a preoperative clearance exam, similar to an annual physical, **WITHIN 30 DAYS PRIOR** to your surgical date.
2. You may need to have a series of pre-operative blood tests. These can be done at your PCP's office, or at a **Northshore Outpatient Lab**.
3. You will need to have a **Nasal Swab** test done within 30 days prior to surgery to see if you are a carrier for staphylococcus. This will be ordered by your breast surgeon. If you test positive for staph, you will be notified of the results and be given additional instructions for an antibiotic ointment and washes for use prior to surgery.
4. If you are **over age 65, or over age 50 AND have a cardiac history**, you will need to have an **EKG**. If your PCP cannot perform this in the office, please let us know. We can place an order in your chart, after which you can go to any **Northshore Cardiographics Department** and have the EKG done. No appointment is required.
5. If you have an implanted **pacemaker or defibrillator**, you will need to have the device evaluated by your cardiologist within 3 months prior to the surgery date.

6. If you have been diagnosed with **sleep apnea**, and have been prescribed a sleep apnea device such as a CPAP machine, you will need to bring this device to the hospital with you.

THE DAY BEFORE SURGERY

1. Change your bedding to make sure you sleep on freshly laundered sheets the night prior to surgery.
2. If you have not already done so, purchase a 4 oz bottle of Hibiclens Skin Cleanser - (contains 4% chlorhexidine gluconate solution) at any pharmacy - it does not require a prescription.
3. Do not shave near the surgical site for 48 hours prior to surgery.

Eating and Drinking

1. Do not eat any solid food after midnight the night prior to surgery.
2. Drink one (12 oz) carbohydrate drink in the evening prior to bed

Your drink preference _____

ALLOWED CARBOHYDRATE DRINK CHOICES:

- | | |
|-------------------|-----------------------|
| * Apple Juice | * Commercial iced tea |
| * Cranberry Juice | * White grape juice |

Washing:

1. THE NIGHT BEFORE SURGERY:
 - Take a shower or bathe, but do not shave near the surgical site.
 - As the LAST part of your normal shower or bathing routine, wash from your neck to your ankles with the Hibiclens (4% chlorhexidine).
 - Use about a palm size amount (1 oz) of this soap. It will not bubble or lather.
 - Rinse completely and repeat. Wash thoroughly near the surgical site.
 - DO NOT use the Hibiclens on your face or hair - use your regular soap and shampoo for these areas prior to using the Hibiclens.
 - AVOID CONTACT OF THE HIBICLENS WITH YOUR EYES AS THIS CAN CAUSE IRRITATION. If some Hibiclens gets in your eyes, rinse thoroughly with water.
 - Use a clean towel to dry off.
 - Put on freshly laundered garments and underwear.

Medication

Take your regular night time medication as previously discussed with your primary care physician.

Expect Our Call

The day before you come to **NorthShore**, staff from the following areas will contact you:

1. Hospital Admitting Department
 - A staff member will call to verify your insurance coverage. If your scheduled procedure is within 48 hours and you have not been contacted, please call the Admitting Department at 847-570-2130 (Evanston)

Hospital), 847-480-3779 (Highland Park Hospital), 847-657-5625 (Glenbrook Hospital), and 847-933-6750 (Skokie Hospital).

2. Ambulatory Surgery Unit (ASU)

- A nurse from the ASU will call a day or two before surgery to review your health history and pre-procedure instructions. The nurse will also confirm the time of your surgery and the time you need to arrive at Northshore. Please have this packet ready and fill in the following information on the front page.

THE MORNING OF SURGERY

1. EATING/DRINKING

- Do not eat any food
- Drink one (12 OZ) carbohydrate drink (clear juice) starting 3-4 hours prior to your scheduled surgery time. **STOP drinking 2 hours before** your scheduled surgery start time.
Your drink preference
- DO NOT drink any additional fluids within the 2 hours prior to surgery or you risk cancellation of your surgery.

2. GETTING DRESSED:

- Shower again with the Hibiclens, using the same instructions as the night before.
- Dry off with a clean towel.
- Put on clean clothing and underwear.
- Do not wear lotion, perfume, deodorant, makeup, fingernail polish, jewelry, or piercings.
- Do not shave near the surgical site for 48 hours prior to surgery
- If you wear contact lenses, consider wearing glasses instead since the lenses will need to be removed for surgery

THINGS TO BRING TO THE HOSPITAL



- ✓ **This booklet!!**
- ✓ Photo ID (driver's license or state ID).
- ✓ Insurance card and information.
- ✓ List of prescription and non-prescription medications that you take (including vitamins, supplements and herbal medications). **DO NOT BRING ANY MEDICATIONS FROM HOME TO THE HOSPITAL.**
- ✓ List of past hospitalizations, illnesses, surgeries, allergies (and allergic reactions) and immunizations.

- ✓ Sleep apnea device such as CPAP if one has been prescribed for your use.
- ✓ Assistive devices, such as walkers, crutches, canes, hearing aids and glasses.
Please label all personal items with your name.
- ✓ Containers for contact lenses, removable dental devices, etc.
- ✓ Names and phone numbers of family or friends to contact in case of emergency.
- ✓ Robe and slippers.
- ✓ Loose comfortable clothes to wear home.
- ✓ Money to purchase newspapers, magazines or other items (limit to \$10 in cash).
- ✓ Copy of your advance directives, if you have such documents.
- ✓ Personal toiletries such as shampoo, deodorant, toothbrush, toothpaste, moisturizer.
- ✓ Please do not bring anything of value, including jewelry. The hospital is not responsible for lost or stolen items.

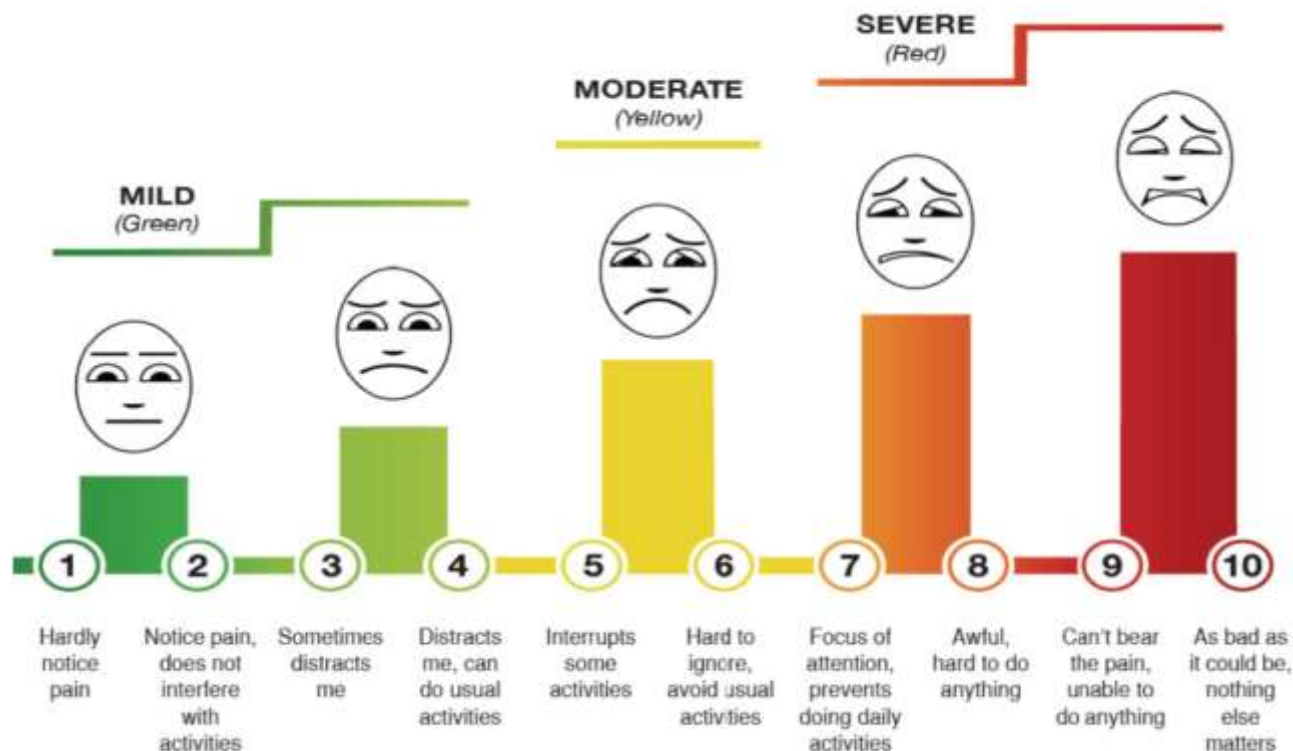
At the Hospital

- I. Arriving to the Hospital:
 - **Evanston** Park on the 5th floor of the parking garage (Notre Dame level). Signs will direct you from the parking garage to the check-In area on the 3rd floor where you are having your procedure. A staff member will greet and direct you from there.
 - **Glenbrook, Highland Park, and Skokie** You will enter through the main hospital entrance. A staff member at the front desk will greet and direct you to the check in area.
 - After check in you will be escorted to your individual room in the Ambulatory Surgery Unit (ASU). There you will meet the nursing staff as well as your anesthesia team to prepare you for your surgery. You will also speak to your surgeon in the ASU before you have your surgery.
- II. Admitting area:
 - You will arrive here first to sign in and complete any admission forms.
- III. Pre-Operative area:
 - The nurse will ask you to change into a hospital gown and complete the pre-operative checklist with you.
 - An IV will be inserted. **Every effort will be made to start the IV on the non-operative arm. However, if that is not possible, the arm on the operative side will be used. There is no evidence to suggest that this increases the risk of complications such as lymphedema.**
 - You will meet members of your anesthesia team and discuss your anesthetic plan.
 - Your plastic surgeon will draw lines on your body with a marker to guide the surgery while you are asleep.
 - You will receive several medications from the staff that have been prescribed for you by your anesthesia and surgery team.
 - These medications will help to prevent pain, nausea/vomiting, and decrease the risk of infection and blood clots after surgery.

- You will take these medications orally with very small sips of water.
 - Your family will be able to stay with you at this time.
- IV. Operating room
- You will be given sedative medication just before going to the OR.
 - The anesthesiologist will put you to sleep in the OR and provide long acting local anesthetic agents to reduce pain after surgery.
 - You will be asleep and pain free during your surgery.
- V. Waiting room
- Your family will be escorted to the waiting room during your surgery.
 - They will be provided with updates and notified when you are out of surgery.
 - They should check in with the desk to provide a contact number in case they leave temporarily for any reason.
 - Chase bank ATM's are located at each hospital.
 - Each hospital has a cafeteria and gift shop for purchasing of food and beverages.
- VI. Post Anesthesia Care Unit (PACU)
- You will wake up here after your surgery is finished.
 - Family is not allowed to visit in the PACU.
 - You may have a mask providing you with oxygen. You may be here for several hours.
 - A nurse will check your vital signs regularly, check your bandages, and make sure you are comfortable.
 - Once your vital signs are stable, you will be transferred to your hospital room. Your family can visit you there.

AFTER SURGERY: INPATIENT

- I. Pain Control
- a) It is important to control your pain because it will help you to:
- Take deep breaths
 - Move more easily
 - Eat better
 - Sleep well
 - Recover faster
 - Do things that are important to you
- b) Your nurse may ask you to describe your pain using a number between 0 and 10. 0 means no pain and 10 is the worst pain you can imagine. The goal is keep your pain at or below 4 out of 10.



c) PECS and PECS II Blocks

- You may have a regional anesthesia technique that provides analgesia to the tissue and nerves around the chest muscles. The block is given in the operating room using a local anesthetic that lasts up to 3 days.

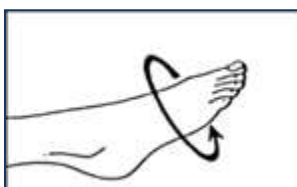
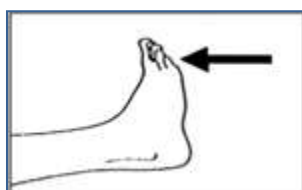
II. Exercises

a) Move around in bed:

- This will help to prevent pneumonia, blood clots, and muscle weakness. The nurses will show you how to move and position yourself for comfort and to protect your surgical site.

b) Leg exercises:

- These exercises help your blood to circulate in your legs. Repeat each exercise 4 to 5 times every half hour while you are awake.
- Rotate your foot to the left and right.
- Wiggle your toes and bend your feet up and down.
- Stretch your legs out straight.



c) Deep Breathing and Coughing Exercises:

- An incentive spirometer is a device that helps you breathe deeply to prevent pneumonia.
 - Sit up straight.
 - Put your mouth tightly around the mouth piece.
 - Take a deep breath in and blow it out slowly. This allows the lungs to fully expand. You will see the piston/ball rise with each breath.
 - Rest for a few seconds and repeat this task 10 times every hour.
 - Cough well after completion to clear your lungs. You may want to use a pillow or your hands to hold your incision taut (splinting) while coughing as this may be painful at first.



The Evening after Surgery - Post-op Day #0

- I. Pain Control
 - Tell your nurse if your pain is getting out of control.
- II. Breathing
 - Do your breathing exercises with the incentive spirometer 10 times every hour.
 - Cough well after each cycle of 10.
- III. Activities
 - Do your leg exercises 4-5 times every hour while awake.

- Get up and sit in a chair with help from your nurse or aide.
 - Track your progress on the checklist (see page 17)
- IV. Eating and Drinking
- Drink liquids as tolerated.
 - Advance to general diet if tolerated.
- V. Tubes and Lines
- An intravenous line (IV) will be giving you a small amount of fluid.

Post-op Day #1

- I. Pain Control
- You will be receiving many scheduled medications to prevent pain, including Tylenol (acetaminophen) and/or Motrin (ibuprofen).
 - We want your pain to be as well controlled as possible. Please tell us if your pain getting is out of control.
- II. Breathing
- Do your breathing exercises with the incentive spirometer 10 times every hour.
 - Cough well after every cycle of 10
- III. Activities
- Sit in a chair during meals.
 - Walk in the hallway 4-5 times daily, with help if needed.
 - Be out of bed, off and on, for a total of 8 hours throughout the day.
 - Track your progress on the checklist (see Page 17)
- IV. Eating and Drinking
- Drink liquids.
 - Start eating a regular diet.
- V. Tubes and Lines
- Your IV fluids will be stopped when you are eating and drinking well.

Goals for Discharge

The goal is to have you prepared to go home before noon on the day after surgery. The following criteria will be used to help us determine when you are ready to go home:

- You are able to eat a diet without feeling nauseous or experiencing any vomiting.
- You have adequate pain control on oral medication.
- You are getting out of bed and walking without help.
- You have a normal body temperature (no fever).
- It is not necessary to have a bowel movement prior to discharge.

We will give you information about your follow-up appointment with your surgeon before you leave the hospital.

HOME CARE INSTRUCTIONS

YOUR PLASTIC SURGEON WILL BE IN CHARGE OF MOST OF YOUR POSTOPERATIVE CARE. Questions can be directed to his or her office.

MEDICATIONS

- You may have pain for a few weeks after surgery. Take acetaminophen (Tylenol) and ibuprofen (anti-inflammatory medicine) to relieve your pain.
- Ibuprofen is best taken with food. If the pain medications are causing a burning sensation or pain in your stomach, stop taking them and call your surgeon. You may take naproxen (Aleve) as an alternative to ibuprofen.
- If your pain is not controlled by acetaminophen and the anti-inflammatory, add the narcotic medication (e.g. tramadol or oxycodone) that your doctor ordered.
- You may also be prescribed a muscle relaxant (Valium/diazepam or Flexeril/cyclobenzaprine), which you may use for muscle cramping or spasm type pain. You may take these in addition to the medications listed above.
- If you are prescribed antibiotics, take them until they are finished or your surgeon tells you to stop.
- If you have severe pain that is not relieved with the medicine that has been recommended for you, call your surgeon or go to the Emergency Room.
- Your surgeon or nurse may ask you to keep a record of your pain and the medications that you take at home. You can do this in the “Notes” section at the end of this booklet.
- Pain medication may cause constipation. To help your bowels stay regular:
 - Drink more liquids.
 - Get regular exercise (a 15 minute walk is a good start!).
 - Take stool softeners (e.g. Colace) if your doctor tells you to do so.
- If you need to continue your pain medication at home and require a refill on a prescription, please notify the Plastic Surgery clinic staff Monday through Friday at 847-504-2300. **It may take one business day to get a refill. Do not wait until your pills are gone.**

DIET

- You should resume your normal diet gradually. It may take time for your appetite to come back. This is normal. You may return to eating a regular diet once at home.
- If you find it hard to eat enough calories, try eating smaller servings at each meal. Add nutritious snacks between meals. Try high protein, high calorie shakes, or commercial supplements such as Ensure or Boost.
- Drink plenty of non-alcoholic liquids.

BRA, DRESSING, and CLOTHING

- Once you leave the hospital, bandages are not required over your incisions - except over your drain site. If there are tape strips on your incision, leave them in place.

- If you are sent home in a surgical bra, continue to wear it as much as possible until your follow-up appointment. You may remove it to shower and launder it.
- If you are not sent home in a surgical bra, do not wear a bra until cleared by your surgeon.
- Try to wear clothes that button up or have zippers in the front.
- Try not to lift your arms over your head to put on T-shirts or sweaters for the first week.

DRAINS

- You will have 1-4 drains placed during surgery. This helps keep fluids from building up under your skin causing swelling and pain. The drainage tube goes through your skin near the surgical incision and is held in place by a stitch. Fluid will drain into the attached bulb.
- Nurses will provide detailed instruction during your hospital stay on how to care for the drain.
- **The drains will be covered by a clear plastic dressing. If this falls off, call the office for a replacement at 847-504-2300.**
- Wash your hands well with soap and warm water for at least 30 seconds prior to emptying the drain.
- Empty the bulb container at least two times a day, in the morning and before bed. Empty more often if needed, whenever it is 1/3 or more full.
- Record the output from your drains each time on the Drainage Record Sheet and bring it with you to each follow-up appointment.
- Drains are usually removed 10 to 20 days after your surgery. If you empty less than 30 mL of fluid from the bulb container for two days in a row, call your surgeon's office to see if the drain should be removed.
- If a drain falls out, cover the site with a gauze bandage and call the office during normal hours.

ACTIVITY

- **SHOWERING:** You may shower 48 hours after surgery. It is OK for water to touch the incision and drain dressings. Do not take a bath, swim, or get into a whirlpool until cleared by your surgeon.
- **SLEEPING:** For the first week after surgery, you may be more comfortable sleeping with a few extra pillows under your head and shoulders to help with swelling. However, this is not necessary. Extra pillows in bed to keep pressure off the surgical site may help.
- **DO NOT PLACE ICE PACKS on your incisions.**
- **ACTIVITY:** You are encouraged to begin walking and resuming light daily activities as soon as possible. To prevent blood clots in your legs, it is important to get out of your chair or bed every hour and walk around for a few minutes. You do not need to do this during your normal sleeping hours. Do not push, pull, or lift anything heavier than 8 pounds (about the weight of a gallon of milk) until cleared by your surgeon.
- **EXERCISE:** You may begin range of motion exercises as directed by your plastic surgeon. Do **NOT** plan to do any strenuous activity or exercise (running, weight lifting, aerobics) for 6 weeks after surgery. When you have been cleared by your

plastic surgeon to start exercising, ease yourself back in. Some stretching or pulling sensations are OK. However, do not push through pain.

- **DRIVING:** Do not drive while taking narcotic pain medication or muscle relaxants. You may drive when you feel comfortable behind the wheel with a seat belt on. For most women, this is at least a week after surgery.
- Do **NOT** engage in any sexual activity for at least 2 to 3 weeks; resume when completely comfortable.

WHAT TO ELSE TO EXPECT:

- Some pain and discomfort should be expected for 3-4 weeks, although it should gradually get better from the first 2-3 days. This pain should be manageable, not debilitating.
- You may have a stinging sensation along the incision line and your drain sites. You may also notice tenderness along your lower rib cage or a feeling as if you are wearing a very tight bra. These sensations will improve.
- Other common sensations include: Numbness under the arm and over the chest and warmth, chafing, pins and needles, or other sensations in the arm. These sensations are caused by the nerves being cut or stretched during the mastectomy. They will gradually get better as the months go by, but some degree of numbness may be permanent.
- You may notice bruising to the skin and incision sites. You may also notice a lumpy/bumpy appearance and may feel hard ridges or areas under your skin.

WHEN TO CALL THE OFFICE DAY OR NIGHT:

- A fever over 100.5 for 2 readings taken 4 hours apart (you do not need to take your temperature unless you feel hot).
- An increase in redness, swelling, or significantly more pain around/under your incisions
- Pain that is not relieved by your medication.
- Persistent diarrhea, nausea or vomiting
- Your drainage becomes cloudy, or has a foul smell
- Your bulb container fills with blood or drainage rapidly re-accumulates after it is emptied

WHEN TO CALL THE OFFICE DURING DAYTIME HOURS:

- You need a prescription refill
- Your drain bulb will not stay compressed
- The drainage tube falls out
- The suture holding the tube in place comes out

NOTES

This image shows a page from a notebook, oriented vertically. At the top center, the word "NOTES" is written in a blue, sans-serif font and is underlined. The page is ruled with horizontal blue lines. A vertical red line runs down the left side of the page, creating a margin. Three circular binder holes are punched along the left edge, one near the top, one in the middle, and one near the bottom. The page is otherwise blank.

NOTES

This image shows a page from a notebook, labeled '16' in the top right corner. The word 'NOTES' is centered at the top and underlined. The page is ruled with horizontal blue lines. A vertical red line runs down the left side, creating a margin. Three circular binder holes are punched along the left edge, one near the top, one in the middle, and one near the bottom. The page is otherwise blank.