Your Journey to Recovery
Breast Reconstruction for Breast Cancer Patients

The Centre, p.c.
Comprehensive Plastic Surgery
Because You Deserve The Best™
Women diagnosed with breast cancer face a difficult time as they restore their health and well-being. During this time women will make many decisions regarding treatment options. This includes the decision to have breast reconstruction surgery. This booklet is intended as a guide for this important option. Our comprehensive, multidisciplinary team has created this booklet to provide patients with in-depth knowledge about their reconstructive options, and to help them make an informed choice.

We dedicate this booklet to our many patients who have had or are considering breast reconstruction surgery. We are honored to be a part of your journey to recovery!

Sincerely,

The Physicians and Staff of The Centre, P.C.
Your Journey to Recovery: Breast Reconstruction for Breast Cancer Patients

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Meet Our Team

Our multidisciplinary reconstructive team includes two board certified plastic surgeons, a nurse practitioner, certified medical assistants, occupational therapists, and a certified medical aesthetic nurse. In addition, we work closely with all the general surgeons and medical oncologists throughout Michiana to coordinate your care to achieve the best possible outcome.
Choosing a Reconstructive Surgeon

A plastic surgeon reconstructs or repairs physical defects of form and function. During thorough and extensive training, a plastic surgeon gains the specific knowledge and surgical skills to complete a multitude of techniques. The surgeons at The Centre, P.C. are board certified plastic surgeons, which means they have completed an extensive residency in the field of plastic surgery and have passed written and oral examinations given by the American Board of Plastic Surgery in order to be considered for the distinction of being called board certified. It is extremely important that when choosing a surgeon to complete your reconstruction, you choose a surgeon that is board certified in plastic surgery.

Plastic surgeon Ronald K. Downs, M.D., F.A.C.S., is the founder of The Centre P.C. He completed his plastic surgery training at Rush Presbyterian St. Luke’s Medical Center in Chicago and has practiced in the Mishawaka and Elkhart area since 1992. He is board certified by the American Board of Plastic Surgery and is a Fellow of the American College of Surgeons. Although Dr. Down’s board certification and credentials attest to his knowledge, his surgical skills is the basis of his greats recognition. He has an excellent reputation and takes pride in helping his patients achieve a natural appearance. Dr. Downs is also known for his compassionate approach and his commitment to achieving the best results possible. He strives to educate his patients about each and every procedure in a warm and caring manner. Breast reconstruction remains an area of expertise for Dr. Downs and one of the main focuses of his practice. Active in the local, state and national medical communities, Dr. Downs is a member of the American Society of Plastic Surgeons, American Society for Aesthetic Plastic Surgery, Indiana State Medical Association, Ohio Valley Plastic Surgery Society and Rush Surgical Society. He was on the Board of Directors for the Indiana State Medical Associating, serving as President in 2003-2004. He remains active in breast reconstruction research, bringing state of the art procedures and methods to the Michiana area.

Plastic surgeon Patrick Viscardi, M.D. joined the surgical team at The Centre P.C. in 1998. He is a summa cumlaude graduate of Dartmouth College and received his Doctor of Medicine form the University of Rochester. Dr. Viscardi completed his internship and general surgery residency at the University of Louisville, where he served as chief resident from 1994 to 1995. To advance his education and refine his skills Dr. Viscardi completed a fellowship in hand surgery in Louisville at the Christine M. Kleinert institute of Hand and Microsurgery. This extra level of education endowed Dr. Viscardi with a comprehensive understanding of the specific physiology and treatment of the hand. Dr. Viscardi earned numerous
Breast Reconstruction Defined

According to the American Cancer Society, breast reconstruction is a surgical procedure in which a reconstructive plastic surgeon recreates all or part of a breast after it has been surgically removed or altered.

It is well documented that both immediate and delayed breast reconstruction provide substantial psychosocial benefits for mastectomy patients in the areas of emotional well-being, vitality, general mental health, social functioning, functional well-being and body image.

You are a candidate for breast reconstruction if you have been diagnosed with breast cancer and have had or will have a mastectomy (surgical removal of the breast). Patients who have elected to undergo prophylactic mastectomy due to positive genetic testing are also candidates for breast reconstruction. In addition, you are a candidate if you have had or will have breast conservation surgery, such as a partial mastectomy or lumpectomy.

Delayed vs. Immediate Reconstruction

Most breast reconstruction can be done at the time of the mastectomy. This is called immediate reconstruction. Reconstruction can also be done months or years later, which is called delayed reconstruction. Typically, you must wait 3 to 4 months following a mastectomy in order to have reconstruction if it was not done at the time of the mastectomy. The decision to have immediate or delayed reconstruction is dependent upon several factors such as other medical conditions and the need for adjuvant therapies (chemotherapy or radiation therapy). The following table illustrates the advantages and disadvantages of immediate and delayed reconstruction.
<table>
<thead>
<tr>
<th>Advantages and Disadvantages of Immediate and Delayed Reconstruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate Reconstruction</strong></td>
</tr>
<tr>
<td>• Less risk of social or emotional difficulties</td>
</tr>
<tr>
<td>• Better cosmetic results</td>
</tr>
<tr>
<td>• Possibly less surgery and lower cost</td>
</tr>
<tr>
<td>• No difference in the rate of development of local cancer recurrence</td>
</tr>
<tr>
<td>• No difference in the ability to detect local cancer recurrence</td>
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<tr>
<td>• No significant delays in getting other treatments</td>
</tr>
<tr>
<td><strong>Delayed Reconstruction</strong></td>
</tr>
<tr>
<td>• Adjuvant therapy does not cause problems to the reconstruction site</td>
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<tr>
<td>• Gives patient more time to think about reconstruction options</td>
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**Breast Reconstruction Options**

The options for reconstruction include direct-to-implant reconstruction, tissue expander/implant reconstruction, autologous flap reconstruction or a combination of these.

The type of reconstruction available to each individual will depend on a number of factors including body shape, current medical conditions, and necessity of adjuvant therapies such as chemotherapy or radiation.

For your convenience there is a Breast Reconstruction Options Chart beginning on page 20 which compares all of the methods of breast reconstruction.

**Direct-to-Implant Reconstruction**

Breast reconstruction with a direct-to-implant, or single stage approach, may be considered in a small number of patients. This is most suitable for patients who are candidates for nipple sparing mastectomy. A permanent implant, saline or silicone, is inserted immediately following the mastectomy, which eliminates the need for an expander. Today, with the use of acellular dermal matrix, such as...
AlloDerm® or Flex HD®, more women are candidates for direct-to-implant reconstruction.

**Tissue Expander/Implant Reconstruction**

With tissue expander/implant reconstruction, your plastic surgeon will insert a tissue expander in a pocket formed under the muscle and skin remaining after the mastectomy. The tissue expander is filled gradually with sterile saline, through a valve, approximately every two weeks during a simple outpatient procedure in the office.

The goal of the tissue expander is to stretch the overlying skin in order to accommodate a permanent implant. The amount of sterile saline added at each visit may vary according to the individual patient’s comfort level. It generally takes eight to twelve weeks to complete the expansion process. If you and your plastic surgeon decide to go with the tissue expander/implant route you will need to have a second stage surgery. It is at this second stage surgery that the tissue expander is exchanged for a permanent implant. The second stage surgery is an outpatient procedure and you are generally back to normal activity within a week.

![Image: Tissue expander placed under pectoralis major muscle and skin after mastectomy.]

**Autologous Flap Reconstruction**

Autologous flap reconstruction uses tissue from another part of your body in order to reconstruct a breast. This tissue generally comes from your abdomen or back. These tissue flaps are connected to their original blood supply and rotated to form a new breast (termed pedicled flaps.)

These operations leave two surgical sites, which means two areas for scarring and complications. There are more opportunities for complications with this type of
procedure and they are generally reserved for salvage procedures. These procedures generally require a longer stay in the hospital and longer recovery time. For these procedures it is imperative that the tissue flap has a healthy blood supply in order for the skin and tissue to remain viable. Patients with poor wound healing ability due to smoking, diabetes, or other health problems may not be a suitable candidate for these types of procedures.

TRAM Flap: Transverse Rectus Abdominis Myocutaneous Flap

A TRAM Flap is breast reconstruction using skin, fat and muscle from the abdomen. A pedicled TRAM flap reconstruction is performed under general anesthesia and takes three to five hours for one breast and four to six hours for both breasts. Patients are hospitalized for four to eight days and can return to work in six to eight weeks. Several temporary drain tubes remain in place after surgery for an average of seven to ten days.

While the benefit of the TRAM flap is a natural looking and feeling breast, the primary disadvantages relate to the abdominal wall donor site. These include potential abdominal wall weakness, bulging, and hernia. Ideal candidates for TRAM flap reconstruction are those who are not candidates for tissue expander/implant reconstruction. You are not a candidate for TRAM flap reconstruction if you do not have enough lower abdominal tissue to create the flaps, have a large overhanging pannus of abdominal skin and fat, have a BMI of 30 or above, have diabetes, are a smoker or quit smoking only recently, or have had previous abdominal surgeries such as abdominoplasty.
Latissimus Dorsi Flap Reconstruction

Reconstruction using the latissimus dorsi muscle from your back is another option for autologous flap reconstruction. An ellipse of skin and your latissimus dorsi muscle will be tunneled from your upper back to your mastectomy area to create your reconstructed breast.

The latissimus dorsi flap is most commonly combined with a tissue expander or permanent implant. The latissimus muscle flap is a workhorse flap for salvage of failed expander-implant reconstructions. The length of surgery for latissimus dorsi flap breast reconstruction is typically two to three hours, and requires one to three post-operative days in the hospital. The initial recovery time is three to four weeks.

Like the TRAM flap, ideal candidates for latissimus dorsi flap reconstruction are those who are not candidates for tissue expander/implant reconstruction, such as those who have had previous radiation.

Breast Conservation vs. Mastectomy

Breast conservation surgery, or lumpectomy, is the removal of the tumor and surrounding breast tissue and preservation of the remaining portion of the breast. The goals of breast conserving surgery are the removal of breast cancer with an adequate surgical margin and maintenance of a breast that is cosmetically acceptable to the patient. It is generally followed by radiation therapy for local control.
Recently, there has been an emergence in the field of oncoplastic surgery which has led to advances in breast conservation treatment. You may not be a candidate for breast conservation surgery if you have small breast size, ptotic breast shape, large body habitus, large tumor size, central, medial, or lower quadrant tumor location, or have segmental or multifocal tumor distribution. The procedure involves removing the breast tissue containing the mass and then repositioning and reshaping the remaining breast tissue. The nipple and areola remain attached, unless the breasts are extremely large and pendulous.

Images obtained from Plasticsurgery.org

**Operations to Address Symmetry**

If you are having a unilateral mastectomy, it is important to consider your other breast when planning your reconstruction. This can mean that you may need to have something surgically done to your natural breast such as augmentation (with an implant), mastopexy (breast lift), reduction or combination thereof. Typically this is done with the second stage surgery if you are having tissue expander/implant reconstruction. These procedures typically do not add any recovery time to your reconstruction. The goal of breast reconstruction is to create breasts that are as symmetric as possible.

**Nipple Reconstruction**

Once you have healed from your breast reconstruction surgery and you are happy with the size and shape of your breasts, the final stage is nipple and areola reconstruction. Typically this takes place about three months following your reconstruction.

A reconstructed nipple does not have feeling, nor does it react to temperature or touch the way a natural nipple would. There are many techniques used to recreate a nipple. Most involve using the skin from your reconstructed breast and rotating a
skin flap. Another technique used is to take a portion of your natural nipple from the opposite side and grafting it to your reconstructed breast. Nipple reconstruction is performed in the office under local anesthetic and typically takes about 15 to 30 minutes.

**Micropigmentation**

The areola, or colored portion around the nipple, is created using micropigmentation, or tattoo. Once you have healed from your nipple reconstruction, typically after six to eight weeks, you will see a licensed medical professional for color matching and tattooing. You may also elect to have the micropigmentation without the nipple reconstruction. Some women choose to have a three dimensional tattoo instead of a reconstructed nipple.

Tattooing is generally painless, but a local anesthetic can be used if necessary. The in-office procedure typically takes approximately 45 minutes per side. You will be given complete instructions following the procedure regarding showering and dressings.

**Revision of Previously Reconstructed Breast**

Patients with significant deformity or disproportion of the reconstructed breasts may require a revision surgery. If the first operation did not bring satisfactory results, a revision procedure may be necessary to achieve a more acceptable aesthetic result. Breast reconstruction revisions may be needed to improve the size and shape of the breast, reduce excess tissue, correct cosmetic defects caused by a lumpectomy, or to revise scars.

**Fat Grafting**

Fat grafting is a procedure that uses the patient’s own subcutaneous fat cells to augment or reshape imperfections in the reconstructed breast. Fat grafting is typically used for making revisions to a reconstructed breast that needs additional contouring. Fat grafting is a simple and safe treatment option that is typically done on an outpatient basis. Fat is removed from the abdomen or flanks and placed in a centrifuge to remove the serum before injecting it into the area that requires correction. Patients will be back to normal daily activity within one week following the procedure.
Risks and Complications

As with any surgery there are risks. Some of the risks and complications include, but are not limited to: bleeding, loss of sensation, failure or loss of implants, implant rippling, fluid accumulation (hematoma or seroma), hernia (associated with autologous flap procedures), infection, asymmetry of the breasts, pain, partial or complete loss of the flaps, poor cosmetic result, scarring, and wound healing problems.

Adjuvant Therapies

Breast reconstruction has not been shown in current research to delay the administration of adjuvant therapies such as chemotherapy and radiation. If your oncologist has recommended chemotherapy, he or she will often wait until you have healed from your mastectomy and reconstruction. If you have wound healing issues or infection, chemotherapy may be delayed. However, research has shown that in order for chemotherapy to be most effective it should be delivered between four and twelve weeks from your initial surgery. If you had tissue expander/implant reconstruction, you can safely receive chemotherapy throughout the expansion process. If you are already undergoing chemotherapy before your reconstruction your surgeon will typically wait four weeks from the completion of your chemotherapy before doing your reconstruction. If you are undergoing radiation therapy, your surgeon will typically wait three months following the completion of radiation before performing your reconstruction.

Reconstructive surgery has not been shown to increase the risk of cancer returning or make it harder to detect if the cancer does return.

Post-Operative Care

After you leave the hospital following your reconstructive surgery, you will be in a compression wrap or post-operative bra. You will also likely have one or more bulb suction-type drains in place when you are sent home, and will be given a sheet to record the amount of drainage. You will strip and empty the drain 2-3 times daily or more often if the bulb fills up, and record it on your log. This will be demonstrated for you before you leave the hospital.
You may be restricted from showering for 24 hours after the drains are removed. You may not swim, bathe, sit in a hot tub, or use lotions or creams on the breast for two to four weeks after surgery or until the incisions have healed completely.

Pain medication should be taken as prescribed. This medication should be gradually tapered or reduced to a point at which narcotics are used only at night time. We also recommend that you use a stool softener while taking pain medication to prevent constipation. Over-the-counter anti-inflammatories, such as Advil, Aleve and Aspirin, may be used at the discretion of your provider.

You may resume normal daily activities the day after surgery; this includes activities that encourage range of motion of the shoulder such as washing or brushing your hair. You will be encouraged to begin arm exercises once the drains have been removed, 3-4 times a day. (Refer to page 13 for arm exercises) You should be able to fully raise your arms over your head within a week of your surgery.

You will also be referred to our Occupational Therapy department within the first week after surgery. Our certified therapists are specially trained in the latest techniques. Our therapy department has developed a specialized massage therapy protocol specifically designed to assist women who have undergone breast reconstruction surgery following a mastectomy. The protocol serves to expedite and improve recovery after breast reconstruction surgery by preventing increased formation of scar tissue, remodeling existing scar tissue, preventing capsular contracture, maintaining shoulder mobility, decreasing and managing edema, and promoting lymphatic drainage.
Therapeutic Exercises

Shoulder Shrugs

Shoulder Rolls

Back Scratch

Wall Crawl

Butterflies

Images from Cancer Help UK, the patient information website of Cancer Research UK
Paying for Breast Reconstruction

In October 1998, Congress passed the Women’s Health and Cancer Rights Act, which requires group health and individual health insurance coverage for reconstructive surgery following a mastectomy. The law requires coverage for reconstruction of the affected breast as well as surgery and reconstruction of the other breast for symmetry. The law also requires that prosthesis be covered as well as any treatment of physical complications at all stages of the process.

Support Services

The American Cancer Society:
The ACS is a voluntary national health organization with local offices around the country. The ACS supports research, provides information about cancer, and offers many programs and services to patients and their families, including the Reach to Recovery Volunteers. The Reach to Recovery Volunteers are breast cancer survivors who give patients and family members an opportunity to express feelings, talk about fears and concerns, and ask questions of someone who has been through the process.
1-800-ACS-2345 or www.cancer.org

RiverBend Cancer Services:
RiverBend Cancer Services is a warm, welcoming place with helpful people and programs for cancer survivors as well as families in our community who are living with a cancer diagnosis. RiverBend offers financial assistance, counseling and support services, nutritional programs, complimentary bra fitting and a wig salon.
www.riverbendcancerservices.org

The American Society of Plastic Surgeons:
The Patients and Consumers section of the ASPS website provides before-and-after photos, frequently asked questions and other educational information on breast reconstruction surgery.
www.plasticsurgery.org

Mentor Corporation:
This website offers educational materials regarding reconstruction options along with before-and-after photos and patient testimonials. You can also find information regarding the safety of implants. Included in your patient education kit are several other resources available in the community.
www.yourbreastoptions.com
Timeline for Reconstruction

The timeline for completion of reconstruction varies from patient to patient depending on the type of reconstruction needed and whether there are unexpected complications.

I. Initial Consultation
   i. Meet the board certified plastic surgeon and together complete an in-depth history.
   
   ii. Reconstructive options will be discussed and a treatment recommendation will be made based upon your individual needs.
       
       i. If you are having immediate reconstruction, your reconstruction will be coordinated with your general surgeon.
       
       ii. Plans will be initiated for scheduling surgery.
       
       iii. The need for lab tests will be determined.

   Initial visit typically lasts about an hour.

II. Pre-op, or ‘Inform and Consent’ Appointment
   
   i. Detailed review of the surgical plan including inform and consent packet.
   
   ii. Any additional questions are addressed.
   
   iii. Clinical photos are taken.
   
   iv. Visit typically takes 15-30 minutes.

III. Surgery Day

Prior to surgery day, you will receive directions and check-in instructions.

Pre-operative care

   i. Your plastic surgeon will apply any pre-operative markings as necessary and take you to the surgical suite.
ii. Your family members will receive waiting room directions.

iii. Immediately following surgery you will be taken to the recovery room for approximately one hour.

iv. After about an hour, your family will be allowed to come in and see you before you are transferred to your room.

v. Your length of hospital stay will depend on the reconstruction. Some surgeries are done on an outpatient basis, while others require several post-operative days in the hospital.

IV. Post-operative Office Visits

Typically within one week of your surgery you will be seen in the office.

   i. Incisions will be examined.

   ii. You will be asked to provide a record of your drain output since surgery and drains may be removed if indicated. Drains are typically removed in about seven to ten days.

   iii. You will receive instructions for wound care and activity. If you were not placed in a compression garment post-operatively it is typically done at your first post-op visit.

   iv. A referral is made to the Occupational Therapy department for evaluation and treatment.

   v. This appointment typically lasts about 15 to 30 minutes.

Second post-op appointment is typically done at one month following surgery.

   vi. Incisions will be examined.

   vii. If indicated the expansion process will begin at this time. Patients are typically expanded with 100cc of sterile saline approximately every two weeks until they are fully expanded.

viii. If indicated any adjuvant therapies may begin barring any complications.
V. 8 Weeks Post-Op

If you had a tissue expander/implant reconstruction, your second stage surgery is generally performed eight to twelve weeks following first stage surgery, once you are fully expanded. It may be delayed, however, until chemotherapy or radiation is completed.

Nipple reconstruction may be performed at this time if you do not require any revision surgery.

VI. 6-8 Weeks Following Nipple Reconstruction

You will be seen by a licensed medical professional for color matching in preparation for tattooing.

i. The licensed professional will work with you to select a suitable color and your order will be placed.

ii. Approximately two weeks later you will come in for a test patch. At this time, if the scar is not mature enough to be pigmented, the licensed professional will discuss treatments to help soften and blend the scar.

iii. Once you are ready the licensed medical professional will administer the tattoo. The procedure takes approximately 30 to 45 minutes per side.

VII. Final Follow-Up Appointment

Typically about six weeks following tattooing. This appointment is anywhere from six months to a year from your initial consultation.

i. Final check.

ii. Clinical photos taken.
Recommended Reading

Lorant, Terry. *Reconstructing Aphrodite* and *Aphrodite Reborn*
These two books are a collection of stories from women who have undergone reconstructive surgery following breast cancer. The women’s stories are accompanied by portraits done by photographer Terry Lorant.

Loves, Dr. Susan. *Breast Book*
Otherwise known as the “bible of women with breast cancer,” Dr. Susan Love’s *Breast Book* encompasses every aspect of the breast including breast care, screening, diagnosis, treatment, research, genetics, reconstruction and implants.

As a healthy, happy thirty-nine-year-old mother with no family history of breast cancer, being diagnosed with the disease rocked Hollye Jacobs’s world. Having worked as a nurse, social worker, and child development specialist for fifteen years, she suddenly found herself in the position of moving into the hospital bed. Looking for and finding Silver Linings buoyed Hollye from the time of her diagnosis throughout her double mastectomy, chemotherapy, radiation, and recovery. They gave her the balance and perspective to get her through the worst days, and they compose the soul of the book.

Roberts, Robin. *Everybody’s Got Something*
Robin Roberts's new memoir in which she recounts the incredible journey that's been her life so far, and the lessons she's learned along the way. With grace, heart, and humor, she writes about overcoming breast cancer.
Skin Care

Our medical rejuvenation spa, Centre Yourself™, offers a variety of medical-grade care products available only through licensed skin care professionals. We now offer Trixéra⁺ Sélectiose® from Avène, an effective skin care product line used to reduce the symptoms of severely dry skin which can result from cancer treatments.

We are also proud to offer mybody™ skin care line. mybody™ is free of parabens, phthalates, sulfates and artificial colorants. mybody’s™ effective skincare formulations combine the latest, skin technologies to enhance the skin from within and help to create overall balance and well-being. Our licensed aestheticians will work with you to find a product that is safe to use while in treatment.
### Breast Reconstruction Options Chart

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Direct-to-implant</th>
<th>Tissue Expander/Implant</th>
</tr>
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<tbody>
<tr>
<td><strong>What Is Done?</strong></td>
<td>Surgeon inserts a permanent implant in a “pocket” created after mastectomy.</td>
<td>Surgeon inserts a tissue expander in a “pocket” under a muscle on the chest and the remaining mastectomy skin. After the tissue has been expanded a second stage surgery is performed and the tissue expanders are replaced with permanent implants.</td>
</tr>
</tbody>
</table>
| **Ideal Candidate** | • Has not received radiation and does not have plans for radiation.  
• Is a candidate for nipple and skin sparing mastectomy.  
• Prefers a single stage surgery and does not desire an autologous flap reconstruction.  
• Plans for bilateral reconstruction.  
• Does not smoke and has good overall health.  
• Does not have ptosis, or drooping, of the breasts.  
• Is of reasonable body weight and size. | • Has not received radiation.  
• Has a good condition of skin for expansion.  
• Prefers shorter surgery and recovery time.  
• Plans for bilateral reconstruction. |
| **Advantages** | • Provides patients with a “one-step,” or single stage operation for breast reconstruction. | • Shorter surgery and recovery time. |
| **Disadvantages** | • There is greater risk of complications such as partial or complete loss of the flap. | • Many appointments for the expansion process.  
• Need for a second stage surgery.  
• Possible need to replace implants over the course of patient’s lifetime. |
<table>
<thead>
<tr>
<th>TRAM Flap Reconstruction</th>
<th>Latissimus Flap Reconstruction</th>
<th>Breast Conservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tissue is taken from the abdomen to create a breast mound.</td>
<td>Tissue is taken from the back to create a breast mound. The tissue may be used alone or overlying an implant.</td>
<td>Breast conservation surgery, or lumpectomy, is the removal of the tumor and surrounding breast tissue and preservation of the remaining portion of the breast.</td>
</tr>
<tr>
<td>• Is healthy enough to undergo a lengthy operation.</td>
<td>• Is healthy enough to undergo a lengthy operation.</td>
<td>• You may NOT be a candidate for breast conservation surgery if you have small breast size, ptotic breast shape, large body habitus, large tumor size, central, medial, or lower quadrant tumor location, or have segmental or multifocal tumor distribution.</td>
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<tr>
<td>• Does not smoke.</td>
<td>• Has had previous radiation.</td>
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<tr>
<td>• Has had previous radiation.</td>
<td>• Does not smoke.</td>
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<tr>
<td>• Has a BMI less than 30.</td>
<td>• Prefers a more natural appearing reconstruction.</td>
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<tr>
<td>• Has not had any other surgeries to the abdominal area (not including C-sections.)</td>
<td>• Is not a candidate for other types of reconstruction.</td>
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<tr>
<td>• Does not have abdominal hernia.</td>
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<tr>
<td>• More natural appearing reconstruction.</td>
<td>• Good option for patient with prior radiation.</td>
<td>• No need for implant.</td>
</tr>
<tr>
<td>• Good option for patients with prior radiation.</td>
<td>• More natural appearing reconstructed breast.</td>
<td>• Single staged surgery.</td>
</tr>
<tr>
<td>• No need for an implant.</td>
<td></td>
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<tr>
<td>• Longer surgery and recovery time.</td>
<td>• Most women will need an implant under the tissue for projection and size.</td>
<td>• Will most likely require radiation therapy for local control.</td>
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<tr>
<td>• Will leave additional scar on the abdomen.</td>
<td>• Risks of complications and scar on the back.</td>
<td></td>
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<tr>
<td>• Risk of hernias and bulges on the abdomen.</td>
<td>• Muscle weakness in the back.</td>
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<tr>
<td>• Risk of partial or complete flap loss.</td>
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<tr>
<td>• Muscle weakness in the abdomen.</td>
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<tr>
<td>Consideration</td>
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<td>----------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
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<tr>
<td><strong>Final Results</strong></td>
<td>• More natural appearing breast with better symmetry.</td>
<td>• Soft, natural appearing breast.</td>
</tr>
<tr>
<td></td>
<td>• May require additional surgeries due to implant related changes.</td>
<td>• May require additional surgeries due to implant related changes.</td>
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<tr>
<td><strong>Permanence</strong></td>
<td>Periodic adjustments and possible replacement of implant.</td>
<td>Periodic adjustments and possible replacement of implant.</td>
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<tr>
<td><strong>Surgery Length</strong></td>
<td>60 to 90 minutes</td>
<td>60 to 90 minutes</td>
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<tr>
<td>(not including</td>
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<tr>
<td>mastectomy)</td>
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<tr>
<td><strong>Hospital Stay</strong></td>
<td>1 to 2 days</td>
<td>1 to 2 days</td>
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<tr>
<td><strong>Recovery</strong></td>
<td>2 to 4 weeks</td>
<td>2 to 4 weeks</td>
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<td><strong>Additional Surgery</strong></td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>for Symmetry</td>
<td></td>
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<tr>
<td><strong>Radiation</strong></td>
<td>Avoid</td>
<td>Avoid</td>
</tr>
<tr>
<td><strong>Treatment</strong></td>
<td></td>
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<tr>
<td><strong>Artificial Implant</strong></td>
<td>Used</td>
<td>Used</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td>• Saline implants</td>
<td>• Saline implants</td>
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<tr>
<td></td>
<td>• Silicone gel implants</td>
<td>• Silicone gel implants</td>
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<tr>
<td></td>
<td>Both types are safe for reconstruction and come in many shapes, sizes and</td>
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</tr>
<tr>
<td></td>
<td>profiles.</td>
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<tr>
<td>Tram Flap Reconstruction</td>
<td>Latissimus Flap Reconstruction</td>
<td>Breast Conservation</td>
</tr>
<tr>
<td>--------------------------</td>
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</tbody>
</table>
| • Soft, natural appearing breast.  
• Ages naturally.  
• May improve abdominal shape. | • Results are good to excellent.  
• Muscle will thin over time.  
• May have fullness under arm where flap was rotated. | • Soft, natural appearing breast.  
• Ages naturally and size fluctuates along with fluctuations in body weight. |
| Most permanent. | Periodic adjustments and possible replacement of implant. | May require adjustments following radiation therapy as this can be somewhat unpredictable. |
| It takes 3 to 5 hours for one breast, and 4 to 6 hours for both breasts. | 2 to 3 hours | Approximately 2 ½ hours. |
| 4 to 8 days | 1 to 3 days | Yes |
| 6 to 8 weeks | 3 to 4 weeks | Yes |
| Yes | Yes | Yes |
| Okay if before reconstruction. | Yes | |
| Rare | Used | |
| • Pedicled TRAM flap | • Latissimus dorsi flap | N/A |
Your Journey To Recovery by: Kellee M. Hedges FNP-BC
The Centre P.C.-Comprehensive Plastic Surgery

Adapted in part from the “Reshaping You, Breast Reconstruction for Breast Cancer Patients” The University of Texas MD Anderson Cancer Center