



STEPHAN

SURGICAL ARTS

Brachioplasty

Patient Education and Surgical Consent

General Information

Brachioplasty is an operation to excise excess skin and fatty tissue from the axilla and upper arm. The most common patient is an individual who previously lost a significant amount of weight and gained excess skin in these areas as a result. This is not a surgical treatment for being overweight and/or for weight loss. Individuals who are obese and intend to lose weight should postpone the operation until they have reached a stable weight. Brachioplasty may be combined with other forms of cosmetic surgery, such as liposuction. However, liposuction alone will not be adequate for treatment of redundant axillary/proximal arm skin, and brachioplasty may be required. The primary downside of brachioplasty is scarring. The scars often are well hidden within the medial arm and axilla, but the scars may become visible at times.

What does a brachioplasty entail?

A brachioplasty operation begins with detailed surgical marking in the preoperative room. The patient is then escorted to the operating room and undergoes general anesthesia. The skin and a significant amount of underlying tissue is removed, and the remaining skin is reapproximated. Three layers of dissolvable sutures are placed under the skin. Special dressings and supportive garments are then placed. The patient is then transferred to the postoperative room and allowed to recover under the care of the nurse and Anesthesiologist. Patients typically take 30-60 minutes to recover and normally return home under the care of a family member or friend. Detailed instructions are reviewed prior to discharge and the patient/caregiver will have Dr. Stephan's cell phone number should any unexpected issues occur.

The Ideal Candidate for a Brachioplasty

The ideal candidate for a brachioplasty is an individual with excess skin of their proximal arms/axillary areas, and of relatively stable overall weight.

Commonly Asked Questions

Will there be a scar?

Anytime that an incision is placed on the skin, a scar will form. However, we take great precautions to minimize and hide scarring. During the operation Dr. Stephan places the incision where it is likely to be hidden and uses specific suturing techniques, types of suture, and dressings that take the tension off the incisions, thus minimizing scarring. The dressings are kept in place for a specific amount of time, particular postoperative instructions are given, and products used to further minimize scarring. However, scarring still is possible.

Will I have drains after the surgery?

You should not need drains with this operation.

Can this operation be performed after a mastectomy?

No. The risk of wound healing issues is too great due to potentially disrupted lymphatic channels from the mastectomy.

Will sutures need to be removed after surgery?

Normally, all sutures are placed under the skin. These sutures dissolve over time and do not need to be removed after the surgery.

How long will I be out of work?

Individuals who undergo this operation can normally return to work in 2 weeks. This also depends on the type of work that the individual performs.

How long before I can exercise?

Please take multiple short walks (i.e. around the house) as soon as you feel steady on your feet. This is imperative for the recovery process. However, please try to not break into a sweat until the steri-strips have been removed. You will then be instructed to slowly increase your activity level. Don't lift anything heavier than 10 lbs for the first four weeks. You may return to light cardio once the steri-strips are removed. You will likely be cleared for full activity by 6 weeks after surgery. This will be further discussed during your postoperative appointments.

When can I shower?

Unless instructed otherwise, you may shower 2 days after surgery. This provides time for your skin to start to heal. Until your steri-strips are removed, you should pat the steri-strips dry and then use a blow dryer on the steri-strips after showering.

When can I drive a car?

You may drive a car when you are no longer taking narcotic pain medications or muscle relaxants and are able to realistically react fast enough to stop the car if a child ran out in front of you. This usually takes 3-4 days after the surgery. Do not take unnecessary risks.

Is this operation performed under general anesthesia?

Yes, this operation is performed under general anesthesia. This is a safe and comfortable way to perform most surgeries. General anesthesia is safer than walking across the street, driving your car, or riding in an airplane. Anesthesia is only provided by Board-Certified Anesthesiologists in our practice. This last fact sets our organization apart from many others.

How long does the operation take?

This varies significantly from patient to patient. However, the operation normally takes 3 hours to complete.

Does someone have to stay with me after surgery?

Yes. A family member/friend must stay with you for at least the first 24 hours after surgery.

When will my swelling go down?

You will be swollen for up to one month postoperatively and continue to experience positive changes for up to 6 months after surgery. This swelling should not limit your ability to perform normal daily activities.

Should I use Vitamin E on my incision(s)?

Please do not use Vitamin E on your incisions. Please use silicone-based scar gel when instructed to do so (as discussed below).

Preoperative Instructions

Smoking

If you smoke, you must stop before surgery. The academic studies regarding how long you should stop smoking prior to cosmetic surgery vary. However, we recommend that you stop smoking for at least 2 weeks before surgery. We reserve the right to cancel the surgery if you continue to smoke and we feel that your smoking may put your surgical result at risk. You also should not smoke during the postoperative period (for at least 6 weeks after surgery), as this may also have serious adverse effects on your ability to heal. Other forms of nicotine (patches, gum, etc) are not acceptable alternatives (as the nicotine in all of these have the similar negative effects).

So, you do not think that we are being harsh:

Nicotine causes vasoconstriction, which is where the small blood vessels clamp down and decrease blood flow to certain areas. This is especially so for the skin. When cosmetic surgery is performed, the skin and tissue deep to the skin are rearranged and the blood flow to these areas may then depend on very small blood vessels (until your body makes more blood vessels over the course of months). If you smoke and undergo cosmetic surgery, you will clamp down these very small blood vessels and will have a much, much higher chance of infection, not healing properly, and even having parts of your skin die and become necrotic. We want all our patients to be very happy with their results and will not risk these complications of smoking.

Medications/Drugs

NSAIDs

Stop taking any over-the-counter medications that may thin your blood at least one week before your surgery. These include aspirin or any of the nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen, Advil, Motrin, Aleve, Midol Extended Relief, Midol Liquid Gels, naproxen, etc. These medications impair the function of your platelets and may make you bleed more during the operation or form a hematoma postoperatively. If you have ongoing pain and feel that you need pain relief medication, please speak with your primary care physician regarding potential safe substitutes.

Alcohol

Do not drink alcoholic beverages for at least three days before surgery.

Prescribed Blood Thinners

If you take a prescribed blood thinner (Plavix, Coumadin, Xarelto, etc) you must speak with the physician prescribing this medication regarding if it is safe to stop for cosmetic surgery. The risk of excessive bleeding and hematoma formation with performing cosmetic surgery on an individual taking any of these medications is too great and will not be performed. You must speak with the physician prescribing this type of medication before stopping it as the risk of stopping the medication may be extremely high as well.

Herbal Supplements

People often do not realize that many herbal supplements thin the blood and may cause significant bleeding during surgery or postoperatively. The supplements that increase the risk of bleeding, and should be discontinued for 1 week before surgery, include, but may not be limited to:

- Gingko biloba
- Garlic (capsules, or foods with excessive garlic)
- Ginseng
- Fish oil
- Dong quai
- Feverfew

If you take Ephedra, you must stop this one week before surgery as this medication increases your risk of adverse cardiovascular events. Talk with your prescribing physician regarding stopping this medication prior to doing so.

Illicit drugs

We are medical professionals bound by HIPPA which is an act that protects patients' information, and we will never disclose your information to another party without your knowledge and written consent. Therefore, please inform us if you use any illicit drugs including, but not limited to marijuana, cocaine, heroin, etc. We ask these questions solely for your safety.

Vitamin E and Zinc

Excess Vitamin E and Zinc may impair your immune system, injure organs, and interact with antibiotics that will be prescribed. Please avoid high doses of these medications 1 week before surgery and for 6 weeks after surgery.

Preoperative Testing

Please have your bloodwork, mammogram, chest x-ray, EKG, etc performed as ordered by our practice. Not everyone will need all these tests. Please have the tests that you were asked to do completed at least 10 days before your operation. This provides us time to review your results and make any adjustments as needed.

Medications to take

Arnica: Take 1 Arnica capsule twice a day, starting 2 days prior to your operation. This medication may be taken on an empty stomach and with other medications. Arnica helps with bruising and wound healing. Arnica in its diluted form (any form that may be bought over the counter or in our practice) is generally considered very safe.

Vitamin C: Take 1000mg of Vitamin C twice a day, starting 1 week prior to surgery. Continue to take this dose for 1 week after surgery as well. Vitamin C helps with wound healing by generating collagen and improving your immune system. It is rare to have any side effects at this dose; however, the most common side effect is diarrhea. If you have diarrhea with this medication, first decrease the dose to 500cc twice a day, and stop it altogether if the symptoms persist.

Multivitamins: Take 1 multivitamin twice a day, starting 1 week prior to surgery. Continue to take this dose for 1 week after surgery and then take 1 multivitamin daily for at least 6 weeks postop.

You will be prescribed other medications by our practice. Please take them as directed.

Showering before surgery

Starting two days before surgery, shower twice a day with Hibiclens (avoid your eyes). This antiseptic wash may be found at a local pharmacy or supermarket. You may, but do not need to, use Hibiclens after surgery.

The day before surgery

Shower with Hibiclens and take your medications as described above. Unless instructed otherwise by the Anesthesiologist or our office staff, do not eat or drink anything after midnight. We recommend eating a decently large meal for dinner that night and drink water/Power Aid/Gatorade just before midnight.

The day of surgery

Take your medications as prescribed with a small sip of water in the morning. Shower with Hibiclens in the morning and do not apply any makeup, lotions, creams, mascara, deodorant, body spray, etc. ...don't put anything on your body of face after showering. Wear comfortable clothes that do not need to be pulled on/off over your head. Most female patients wear comfortable pants and a loose-fitting sweatshirt that zips completely down the front. Please do not wear any jewelry.

Please arrive at the time instructed and have a seat in the Stephan Surgical Arts waiting room. For female patients, please refrain (if possible) from using the restroom at that time as a urine pregnancy test may need to be acquired. You will be greeted by a staff member or the nurse, and our nurse will walk with you to our

preoperative waiting room. If family members/friends are with you, they are welcome to come with you to the preoperative waiting room. Once in this room, our nurse will review your medical history, take your vital signs, and start an intravenous line. Our Anesthesiologist will also speak with you at that time. Dr. Stephan will meet you there as well and mark the surgical sites.

From there, you will be directed into the operating room, given general anesthesia, and the next thing that you will know is waking up in the recovery room under the care of your nurse and Anesthesiologist. Family members/friends will accompany you in the recovery room, Dr. Stephan will answer any additional questions, and your medications will be reviewed. Once you are comfortable, you will be accompanied to your family members' or friend's vehicle for you ride home. Patient's typically stay in the recovery room for 30-60 minutes.

The night after surgery

A friend/family member must accompany you for the first 24 hours after surgery. Please take your medications as directed. You will be provided Dr. Stephan's cell phone number in case you have any questions and will have an appointment arranged for 1-4 days postoperatively. You will be sore around the surgical site(s), but you need to start taking multiple short walks as soon as you feel steady on your feet. This is imperative for your recovery. Please do not remove the surgical garments until instructed to do so. You should start with bland food and liquids, and slowly advance your diet as tolerated back to your normal diet. Sleep on your back, and it often helps to have a pillow under you knees. Also, you may experience drainage that night. This drainage is from the fluid infiltrated prior to performing liposuction.

General Postoperative Course/Guidelines (These may vary with your individual situation)

- The first follow up appointment is 1-4 days after surgery; this will vary with the individual patient and surgery
- You will also have follow up appointments scheduled for approximately 1 week, 2 weeks, 6 weeks, and 10 weeks after surgery.
- The prescribed pain medications and muscle relaxants may cause constipation. We recommend taking over-the-counter Colace (as directed on the bottle) if you are taking prescribed narcotic pain medication. If you experience constipation and are already taking Colace, take Milk of Magnesia (as directed on the bottle). Walking also helps to relieve constipation.
- Do not drink alcoholic beverages for the first 48 hours after surgery. Also, do not drink alcohol if you are taking the prescribed pain medication or muscle relaxant.
- Keep the surgical garments in place until your first postoperative appointment or first shower, whichever comes first.
- Start showering on postoperative day 2. Take your surgical garments off with the help of another person and then sit down for 2-3 minutes before getting into the shower. This is to keep you from becoming lightheaded when you take the tight garment off. Until we remove the paper tapes in the clinic, shower with your back to the water, and let soapy water fall over your paper tapes. Avoid scrubbing the paper tapes as we would like these to remain in place for approximately 2 weeks. After showering pat the paper tapes dry carefully, and then dry them with a blow dryer on the cool setting. Be careful to not burn your skin. Put your surgical garments back on after drying off.
- For the first week, wear the surgical garment for 24 hours a day (except for when showering). After the first week, wear the garment for at least 18 hours a day. This will be discussed in more detail during your follow up appointments.

- You should avoid exercising to the point that you break a sweat until the paper tapes are removed in our clinic. Please do take multiple short walks (i.e. around the house) daily; this is important for the healing process.
- Once your paper tapes are removed, you will likely be asked to use scar gel. You may use an over-the-counter scar gel; however, we have a prescription-strength scar gel in our clinic that works extremely well.
- You should use scar gel for at least 3 months after surgery.
- Keep your incisions out of the sun for at least 6 months and minimize sunlight exposure to the incision(s) for 12 months. If you would like to go out in the sun after the paper tapes are removed and before 12 months postoperatively, place scar gel onto the incision(s) and then cover the incision/scar gel with sunscreen (at least SPF 50). Reapply the sunscreen often. Sunlight can make the incisions turn into dark scars.
- You may experience bruising and lumpiness after surgery. This should resolve, and we will monitor it during the postoperative visits if it is present.
- Both decreased and increased skin sensation is possible. This resolves over time (normally 6-12 months).
- If you experience significant bleeding (more than minimal bleeding through the bandages), uncontrolled pain, or other concerns/problems, please call Dr. Stephan's office (813-549-6299). You will also be provided Dr. Stephan's cell phone number should you experience any issues after business hours.

Surgical Consent – Brachioplasty

The purpose of this informed consent and patient education form is to provide written information regarding the risks, benefits and alternatives of the procedure named above. This material serves as a supplement to the discussion you have with your doctor/healthcare provider. It is important that you fully understand this information, so please read this document thoroughly. If you have any questions regarding the procedure, ask your doctor/healthcare professional prior to signing the consent form.

Alternative Treatments

A brachioplasty is a cosmetic operation, and therefore, an alternative is to not have a procedure performed at all. This operation addresses removal of excess skin. A possible alternative is only to perform liposuction of the arms; however, this will not address excess skin. The nuances of this vs other operations are discussed in detail during the surgical consultation. Diet and exercise may help to reduce overall excess body fat.

Risks of Brachioplasty Surgery

No surgery or procedure is without risk. The risk of an adverse event is small, but not zero. Also, every procedure has its limitations. Although the majority of patients do not experience complications, you should discuss these with your cosmetic surgeon in order to make certain that you understand the risks, limitations, and possible consequences of brachioplasty surgery. The risks include, but are not limited to:

- 1) **Bleeding and Bruising:** It is possible, although very unusual, to experience a bleeding episode during or after surgery. Serious bleeding is very rare. Should postoperative bleeding occur it may require emergency treatment to drain the accumulated blood and/or have a blood transfusion.

Aspirin, anti-inflammatory medications, platelet inhibitors, anticoagulants, Vitamin E, ginkgo biloba, alcohol, and other herbs or homeopathic remedies may contribute to a greater risk of bleeding/bruising. Do not take these for seven days before surgery. If you are prescribed any blood thinning medications, you must speak with the physician who prescribed the medication prior to stopping it. Again, do not stop these medications before speaking with your prescribing physician.

- 2) Infection: Infection is unusual with brachioplasty. Should infection occur, additional treatment (including antibiotics and possibly additional surgery) may be necessary.
- 3) Skin Contour Irregularities: Irregularities and depressions may occur as may wrinkling of the skin. These normally smooth over time, but additional surgery (under local or general anesthesia) may be required to correct the irregularities.
- 4) Asymmetry: Measures are taken to provide a symmetric result. However, asymmetries are possible. Factors such as skin tone, fatty deposits, bony prominences, and muscle tone may contribute to asymmetry as well.
- 5) Pain: Any procedure or surgery may cause pain. This is normally short-lived. It is very unusual to experience chronic pain from this operation; however, it is possible for a nerve to become entrapped in scar tissue and cause chronic pain. This may require additional procedures and/or operations to correct.
- 6) Changes in Skin Sensation: It is possible to experience either increased or decreased sensation of the skin after this operation. It is exceptionally rare for these changes to be permanent, but it is possible.
- 7) Scarring of the Skin: Excessive scarring is uncommon. However, in some cases, abnormal scarring may result. These scars may be raised and a different color of the surrounding skin. Additional treatments (i.e. injections, surgery, etc) may be required to correct excessive scarring.
- 8) Allergic Reactions: Rarely, local allergies to tape, adhesives, suture material, or other topical preparations have been reported. Systemic (body-wide) allergic reactions may occur due to drugs used during or after the operation. Allergic reactions may require additional treatment.
- 9) Delayed or Poor Wound Healing: Wound disruption and delayed healing are rare, but both are possible. Rarely, areas of the arms may not heal well, and the skin could die. This would require medical and surgical treatment, and result in a longer than expected recovery time. **Smokers have a much higher risk of skin loss and wound healing complications.** We reserve the right to cancel surgery if a patient does not quit tobacco for at least 2 weeks before the operation. Dr. Stephan and his staff are not responsible (or liable) for poor postoperative wound healing if the patient smokes just before or after surgery.
- 10) "Spitting Sutures": Although uncommon, the dissolvable sutures placed under the skin may come to the surface of the skin. This may require removal of the suture. This is unlikely to affect overall healing.
- 11) Injury to Deep Structures: Although exceptionally rare, there have been reports of injury to underlying nerves and blood vessels. These injuries may be temporary or permanent.
- 12) Long-Term Effects: Subsequent alterations in body contour may occur as a result of weight loss or gain, aging, pregnancy, or other life events. This may lead the individual to seek additional surgery.

- 13) Unsatisfactory Results: Uncommonly, patients may be disappointed with the results of their operation. This may require additional procedures or operations to correct.
- 14) Pulmonary Complications: Rarely, pulmonary complications may result from blood clots or partial collapse of the lungs after general anesthesia. If these complications occur, additional treatment and possibly hospitalization may be required. Pulmonary emboli (blood clots that break off and travel to the lungs) can be life-threatening, and fatal in rare circumstances.
- 15) Seroma: Infrequently, fluid collections occur under the skin. If this occurs, additional procedures may be necessary to drain the fluid. Drainage of this fluid carries the risk of causing an infected fluid collection, which in turn, may require additional medical or surgical treatment.
- 16) Surgical Anesthesia: Both local and general anesthesia carry risks of complication, injury, or even death. This is extremely, extremely rare. At Stephan Surgical Arts we only use Board-Certified Anesthesiologists for anesthesia administration.

Medications

As stated above: Aspirin, anti-inflammatory medications, platelet inhibitors, anticoagulants, Vitamin E, ginkgo biloba, alcohol, and other herbs or homeopathic remedies may contribute to a greater risk of bleeding/bruising. Stop these medications 7 days prior to your surgery. However, never stop a prescribed medication without first speaking with your prescribing physician. Stopping a prescribed blood thinner (i.e. Plavix, Coumadin, etc) without your prescribing physician's knowledge and consent may increase your risk of heart attack, stroke, or even death.

Pregnancy and Neurologic Diseases

Pregnant women should not undergo cosmetic operations.

Mental Health Disorders and Cosmetic Surgery/Procedures

All patients seeking to undergo elective procedures and/or surgery should have realistic expectations and be of sound judgment. Please discuss any history of significant emotional depression or mental health disorders with your provider before any elective procedure or surgery.

Financial Responsibilities

The cost of surgery involves several charges for the services provided. The total includes surgical practice fees, the costs of anesthesia, surgical supplies, operating room staff reimbursement, laboratory results, follow-up appointments, etc. Additional costs may occur should complications develop from surgery. We make every effort to help you achieve the results that you seek. However, this is a cosmetic operation and is non-refundable.

Consent for Surgery

- 1) I hereby authorize Dr. Bradley Stephan, M.D. and such assistants as selected by Dr. Stephan to perform the following procedure: **Brachioplasty**

- 2) I recognize that during the course of the operation and medical treatment or anesthesia, unforeseen conditions may necessitate different procedures than those above. I therefore authorize the above physician and assistants or designees to perform such other procedures that are in the exercise of his or her professional judgment necessary and desirable. The authority granted under this paragraph shall include all conditions that require treatment and are not known to my physician at the time the procedure is begun.
- 3) I consent to the administration of such anesthetics considered necessary or advisable. I understand that all forms of anesthesia involve risk and the possibility of complications, injury, and sometimes death.
- 4) I acknowledge that no guarantee has been given by anyone as to the results that may be obtained.
- 5) I consent to the photographing or televising of the operation(s) or procedure(s) to be performed, including appropriate portions of my body, for medical, scientific or educational purposes, provided my identity is not revealed by the pictures.
- 6) IT HAS BEEN EXPLAINED TO ME IN A WAY THAT I UNDERSTAND:
 - a. THE ABOVE TREATMENT OR PROCEDURE TO BE UNDERTAKEN
 - b. THERE MAY BE ALTERNATIVE PROCEDURES OR METHODS OF TREATMENT
 - c. THERE ARE RISKS TO THE PROCEDURE OR TREATMENT PROPOSED
- 7) I understand and agree that all services rendered will be charged directly to me, and I am personally responsible for payment. I further agree, in the event of non-payment, to bear the cost of collection, and/or court costs and reasonable legal fees, should they be required.