



Brow Lift Surgery



Visit our website for more information

NorthlandPlasticSurgery.com

Northland Plastic Surgery

Surgery Handbook

Brow Lift

**A surgical procedure to correct sagging
of the eyebrows and soften forehead
wrinkles.**

Northland Plastic Surgery
4316 Rice Lake Rd, Ste 109
Duluth, MN 55811

(218) 724-7363
www.northlandplasticsurgery.com

TABLE OF CONTENTS

Procedure Overview – Brow Lift	1
Preparing for Surgery.....	2
Medications to Avoid.....	3
What to Expect at Lakewalk Surgery Center	5
General Anesthesia Information.....	6
Information About Monitored Anesthesia Care	7
Surgical Risks	8
Surgical Risks – Brow Lift	10
Medications After Brow Lift	12
Postoperative Instructions	13
Postoperative Instructions – Brow Lift.....	14
As You Heal	15

PROCEDURE OVERVIEW – BROW LIFT

Wrinkles and frown lines often first appear in the brow and forehead area. As you age, your eyebrows may move lower on your face and the outer sides of your eyelids may start to sag. Creases can develop on your forehead and at the top of your nose. These changes may make a person appear sad, angry, or tired. A brow lift, sometimes called a forehead lift, can correct drooping brows, heavy lids, and soften forehead wrinkles to create a more youthful and relaxed appearance. A brow lift can be done alone or in combination with other procedures such as a face lift, blepharoplasty, or laser skin resurfacing.

Brow lift surgery can be done at any age; most patients seeking this type of surgery are 40-60 years old. Brow lift surgery is performed on an outpatient basis using local anesthesia with sedation and takes approximately 2 hours. When additional procedures are performed at the same time, general anesthesia may be used. There are several techniques to the browlift depending on your features, your surgeon's preferences, and your desired results. In the traditional method, an incision is placed in front of or slightly behind the hairline across the scalp. In the endoscopic technique, an instrument with a fiberoptic light source and camera is inserted through small incisions placed behind the hairline. This allows the surgeon to see and work on tissues with special instruments also placed through the incisions.

After brow lift surgery a head dressing of thick gauze will be placed over the brow area. This will be removed after 1-3 days. Swelling and bruising will diminish over several weeks. Discomfort is usually mild and well controlled with oral medication. Strenuous activity should be avoided for at least 2 weeks after surgery. Patients may return to work after 2 weeks, depending on their job requirements.

People are generally happy with the results of their brow lift. The results of a brow lift are long lasting, lasting on average ten years. Due to gravity and time, the procedure may need to be done again.

PREPARING FOR SURGERY

STARTING NOW

- **STOP SMOKING AND ALL NICOTINE PRODUCTS:** We strongly recommend that you stop the use of ALL nicotine products at least one month before your surgery. Smoking reduces circulation to the skin and slows healing. In some cases, your physician may cancel your surgery if you do not follow this recommendation.

2 WEEKS BEFORE SURGERY

- **STOP 2 WEEKS PRIOR:** Fish oil, garlic, ginger, ginkgo biloba, ma huang, and vitamin E. Any herbal or homeopathic supplement.
- **STOP 10 – 14 DAYS PRIOR:** Do not take anti-inflammatories. Review the provided list of drugs to avoid and discontinue their use 10 – 14 days before your surgery. Such drugs can cause bleeding, delay in healing, anesthesia conflicts, infection, or problems during and after surgery. Use medications containing acetaminophen (such as Tylenol) instead. If you are unsure about discontinuing a medication, please consult with your primary physician.

24 – 48 HOURS BEFORE YOUR SURGERY

- **CONFIRM YOUR SURGERY TIME:** A nurse will call you 1 – 2 days before your surgery to review your medical status and confirm your surgery time. If a nurse has not reached you by 3:00 PM the day before your surgery, please call Lakewalk Surgery Center at 218-728-0650 or 877-728-0650 for your final preoperative instructions.
- **EATING AND DRINKING:** Do not eat or drink anything after 12:00 midnight the night before your surgery. This includes water. Do not drink alcohol within 24 hours of surgery.

THE MORNING OF SURGERY

- **MEDICATIONS:** If you take a daily medication that must be taken in the morning, you may take it with a sip of water in the early morning. Absolutely do not eat or drink anything else.
- **ORAL HYGIENE:** You may brush your teeth but DO NOT swallow the water.
- **CLEANSING:** Shower or bathe using an antibacterial soap such as Dial the morning of your surgery.
- **TOPICALS:** Please do not wear moisturizers, creams, lotions, deodorant, or make-up.
- **CLOTHING:** Wear comfortable, loose-fitting clothing that does not need to be put on over your head. Remove hair accessories and jewelry. Please do not bring valuables with you.

MEDICATIONS TO AVOID

- We have provided a list of medications that should be avoided when you are having surgery. These medications can prolong bleeding and should be avoided for 10 – 14 days before your surgery. Your surgeon will advise you when it is safe for you to use anti-inflammatories after your surgery.
- Please review the list carefully. Check the labels of all medicines that you take, even those available without a prescription, to make sure you are not taking any of these substances. If you have questions about any of the medications that you are taking, please let us know or talk with your primary care physician. It is important that we know all the current medications, vitamins, herbs, or other supplements that you are taking.
- If you need a medication for pain during this time, you may use products containing acetaminophen (Tylenol).

Aspirin medications to avoid

4-Way Cold Tablets	Ecotrin products	Talwin
5-Aminosalicylic Acid	Empirin products	Triaminicin
Acetylsalicylic Acid	Excedrin products	Trilisate
Alka-Seltzer products	Equagesic	Vanquish
Anacin products	Fiorinal products	Wesprin
Arthritis foundation products	Goody's HA powder	Zorprin
Arthritis pain formula	Lanorinal	
Aspirin (ASA)	Magnesium Salicylate	
Ascriptin products	Midol products	
Aspergum	Meproamate	
Azulfidine products	Mesalamine	
BC powder or tablets	Methocarbamol	
Bayer products	Momentum	
Bismatrol products	Mono-Gesic	
Butalbital Compound	Nighttime effervescent cold	
Bufferin products	Norgesic products	
Cheracol	Oxycodone	
Coricidin	Pepto-Bismol	
Darvon	Percodan products	
Disalcid	Salicylate products	
Doan's products	Sine-off	
Dristan	Sinutab	
Easprin	Soma compound	

Nonsteroidal anti-inflammatory medications to avoid

Advil products	Ibuprofen	Ponstel
Aleve	Indocin products	Relafen
Anaprox products	Indomethacin products	Tordal
Ansaid	Meclomen	Trilisate
Bextra	Midol products	Voltaren
Cataflam	Motrin products	
Celebrex	Nalfon products	
Clinoril	Naprelan Tablets	
Daypro	Naprosyn	
Dolobid	Nuprin	
Feldene	Orudis products	
Fenoprofen	Oruvail	

Other medications to avoid

Accutrim	Heparin	Plavix
Aggrenox	Hydrocortisone	Pletal
Agrylin	Lovenox	Ticlid
Coumadin	Miradon	Warfarin
Dipyridamole	Persantin	

WHAT TO EXPECT AT LAKEWALK SURGERY CENTER

Going to the operating room is not a normal experience for most of us. Your surgeon and all the staff caring for you recognize the anxiety with which most patients approach this step in the process of achieving their goals. A description of the surgery experience will help you feel more comfortable.

- When you arrive at Lakewalk Surgery Center you will be escorted to a private room. You will be asked to change into a gown and robe and a nurse will do a general assessment (blood pressure, pulse, etc.). An IV (intravenous line) will be started in your hand or forearm. Your surgeon and a member of the anesthesia staff will meet with you before you enter the operating suite. This is the time for final surgical planning; for certain procedures the surgeon may draw on your skin to aid him later during the procedure. There will be time for last minute questions.
- Once you enter the operating room, the staff will do everything they can to make you feel secure. Monitoring devices will be connected to you to ensure your safety during the procedure. Medicines that will make you drowsy will be administered through your IV.
- When your surgery has been completed and your dressings are in place, you will return to a private room for recovery. During this period, a registered nurse will take care of you and monitor you until you are ready to leave the surgery center. All the nurses at Lakewalk Surgery Center are certified for advanced cardiac life support. The surgery center is equipped just like a hospital, and is one reason Lakewalk Surgery Center is fully accredited.
- Your stay in the recovery area will vary depending on the type of surgery and length of anesthesia. Family or personal friends may be with you in the recovery room. The nurse can contact significant others when you arrive in recovery or when you are ready to be discharged. Even though you will be awake during this time, it is not unusual to not remember much about your recovery after surgery. This is related to the effects of the medications used during anesthesia.
- You can be assured that the staff at Lakewalk Surgery Center will do everything possible to make your surgical experience safe, comfortable, and confidential.
- **You must arrange for someone to bring you to and drive you home from the surgery center. Under no conditions will you be allowed to drive or take a taxi after surgery. It is also important that you have a family member or friend remain with you the first 24 hours after surgery while the effects of anesthesia wear off.**

GENERAL ANESTHESIA INFORMATION

- When general anesthesia is used, you will be sound asleep and under the care of the anesthesia staff throughout the operation. Lakewalk Surgery Center operating rooms have been designed to be spacious and comfortable. Once you are lying on the operating table, you will be connected to several monitors. After you have breathed pure oxygen for a few minutes, you will be given a sedative to help you fall asleep. You will breathe an anesthetic gas and be given medications through your IV to keep you asleep and pain free. The anesthesia staff will monitor your medical condition and assist your breathing throughout the procedure.
- The anesthesiologist or CRN-A (certified registered nurse anesthetist) spends all their time during the procedure ensuring your safety. Extremely sensitive monitors are used during surgery and have greatly reduced the risks of anesthesia. A tiny change in the oxygen level in your blood, the amount of carbon dioxide you breathe out, the percentage of anesthetic gas being administered, your heart rate, or your blood pressure are reported and treated immediately.
- Today's anesthesia monitoring equipment is much safer than in the past. The anesthesia and monitoring equipment is routinely maintained and is the same quality as the equipment in any major hospital.
- Many precautions are taken before and during your surgery to prevent side effects from anesthesia. Minor side effects can include dry throat, soreness of the jaw, nausea, vomiting, or memory lapse. Significant risks are rare especially for patients having elective surgery and who have good general health.

INFORMATION ABOUT MONITORED ANESTHESIA CARE

- This type of anesthesia is used when a local anesthetic is effective for alleviating pain but the injection of the anesthetic or the length of the procedure may be uncomfortable for the patient. Procedures that do not require deep anesthesia or muscle relaxation can be done with monitored anesthesia care (MAC).
- When MAC is used, you will be drowsy and relaxed but not unconscious. The anesthesia staff will always monitor your medical condition and comfort. An intravenous catheter (IV) will be placed in your arm when you are in the preoperative room. When you enter the operating room, you will be asked to lie on the operating table, and you will be connected to several monitors. Medications will be given through your IV that will cause you to feel relaxed and sleepy. Your surgeon will inject a local anesthetic into the tissues that temporarily blocks the nerve endings in that area.
- MAC has several advantages. During any potentially painful part of the procedure, the anesthesiologist or nurse anesthetist can give you brief deep sedation so that you will not feel or remember any discomfort. The anesthesia staff always monitors your medical condition. Any change in your blood pressure or heart rate will receive immediate attention. Patients usually recover rapidly from MAC; most people feel normal within an hour or two after surgery.

SURGICAL RISKS

We want you to fully understand the risks involved in surgery so you can make an informed decision. Although complications are infrequent, all operations have some degree of risk. We will use our expertise and knowledge to avoid complications in so far as we are able. If a complication does occur, we will use those same skills to solve the problem quickly. The importance of having a highly qualified medical team and the use of a certified facility cannot be overestimated. In general, the least serious problems occur more often, and the more serious problems occur rarely. Most complications involve a lengthened recovery period rather than any permanent effect on your final result.

NORMAL SYMPTOMS

- **SWELLING AND BRUISING:** Moderate swelling and bruising are normal after any surgery. Severe swelling and bruising may be a symptom of persistent bleeding or development of an infection.
- **DISCOMFORT OR PAIN:** Mild to moderate discomfort or pain is normal after any surgery. If pain becomes severe and is not relieved by pain medication, you should call our office.
- **CRUSTING OR SCABBING:** You may develop some crusting or scabbing along the incision line. You may apply a small amount of antibiotic ointment on these areas until they are healed.
- **ITCHING:** Itching and occasional shooting electrical sensations often occur as the skin and nerve endings heal. Ice, skin moisturizers, and massage are sometimes helpful. These symptoms are common.
- **REDNESS OF SCARS:** All new scars are red, dark pink, or purple. Scars on the breasts or body may take a year or longer to fade and become flesh colored. All wounds take at least one year to fully mature. You will have scars after an operation. The final look of the scar(s) CANNOT be predicted. Everyone heals differently. The scar is permanent.

COMMON RISKS

- **HEMATOMA:** Small collections of blood under the skin are usually allowed to absorb spontaneously. Larger hematomas may require aspiration, drainage, or even surgical removal to achieve the best result.

- **INFLAMMATION AND INFECTION:** A superficial infection may require antibiotic ointment. Deeper infections are treated with oral antibiotics. Development of an abscess usually requires drainage.
- **THICK, WIDE, OR DEPRESSED SCARS:** Abnormal scars may occur even though we use the most modern plastic surgery techniques. Placement of silicone sheeting on the scars, massage, injection of steroids into the scars, laser treatment, or further surgery to correct the scars may be occasionally necessary. Most scars improve significantly with time. Areas of the body scar differently and people form scars differently depending on ethnicity, skin color and type, and other factors that affect scar development. Your own history of scarring should give you some indication of what you can expect, although even this can change with time.
- **WOUND SEPARATION OR DELAYED HEALING:** This can be a common occurrence. Any incision, during the healing phase, may separate or heal unusually slow for several reasons. These include inflammation, infection, wound tension, decreased circulation, smoking, or excess external pressure. If delayed healing occurs, the outcome is usually not significantly affected. Occasionally revision of a widened scar may be indicated.
- **SENSITIVITY OR ALLERGY TO DRESSINGS OR TAPE:** Occasionally, allergic reactions or sensitivity may occur from soap, ointment, tape, or sutures used during or after surgery. Such problems are unusual and are typically mild and easily treated. In extremely rare circumstances, an allergic reaction can be severe and require aggressive treatment or even hospitalization.
- **INCREASED RISKS FOR SMOKERS:** Smokers have a greater chance of skin loss and poor healing because of decreased skin circulation. We strongly recommend that you discontinue smoking and use the of all nicotine products at least one month before your surgery.
- **INJURY TO DEEPER STRUCTURES:** Blood vessels, nerves and muscles may be injured during surgery. The incidence of such injuries is rare.

RARE COMPLICATIONS

- If they are severe, any of the problems mentioned under Common Risks may significantly delay healing or necessitate further surgical procedures.
- Medical complications such a pulmonary embolism, severe allergic reaction to medications, cardiac arrhythmias, heart attack, and hyperthermia are rare but serious and life-threatening problems. Informing us of all pertinent medical data before surgery is extremely important; failing to do so may cause serious problems for you and for the medical team during surgery.

SURGICAL RISKS – BROW LIFT

- **INCISIONS:** When an endoscope is used to perform a brow lift, 3-5 small half-inch incisions are placed behind the hairline across the top of the scalp. The incisions are closed with staples. It is possible that during an endoscopic browlift it may be necessary to create a traditional forehead incision. In this case, a full incision will be made across the top of the scalp.
- **MUSCLE WEAKNESS:** Though very unusual, weakness of one or both sides of the forehead muscle can occur. If this occurs, it will usually resolve within a few months. It is possible that muscle weakness or paralysis could be permanent.
- **FLUID ACCUMULATION:** Swelling of the forehead is usually minimal. Rarely, fluid will accumulate under the skin after surgery. If this occurs, aspiration of the fluid with a needle is performed until the fluid diminishes. If this is unsuccessful, additional surgery may be necessary.
- **ANCHORING SCREWS:** At the 2 central incisions on the scalp, small screws may be used to secure the scalp in the newly elevated position. The screws are inserted into the outer covering of the skull and the skin is stapled into position. The screws are left in place for 2-4 weeks. They do not cause discomfort while in place or when removed.
- **ASYMMETRY:** No one's face is totally symmetrical. Many people notice asymmetry for the first time when they scrutinize themselves after a facial procedure. Although every attempt will be made to improve symmetry of the brows, complete symmetry rarely occurs. Small height differences between the two brows can usually be corrected; other differences may remain.
- **NUMBNESS:** When a traditional incision is used, numbness of the scalp is usually experienced. One of the advantages of an endoscopic brow lift is that numbness is decreased. Areas of numbness can still occur. Numbness usually resolves slowly over several months. With both approaches it is possible to have some permanent numbness.
- **HAIR LOSS:** When surgery is performed where there are hair follicles, some areas of hair loss can occur. This is rare with the endoscopic technique. If hair loss occurs, it is rarely permanent.
- **CONTOUR ABNORMALITIES:** You may notice thickening and irregularities under the skin as healing takes place. Ridges of the scalp skin may be felt initially but usually resolve with time.

- **ITCHING:** Itching is a common side effect when the skin is healing. Itching of the forehead and scalp may be present for several months after surgery. An oral antihistamine and massage of the skin can help reduce itching.
- **RESIDUAL FROWN LINES:** Forehead wrinkles caused by the muscles used for expression are usually deep. Weakening the muscles and tightening the skin improves the appearance of forehead wrinkles but residual lines may still be present.

ALTERNATIVES:

- Brow lift is an elective procedure. Alternatives include not having surgery, browpexy, injections of Botox, collagen, or fat, and blepharoplasty.

MEDICATIONS AFTER BROW LIFT

You will be given prescription(s) the day of your surgery. It is important that you use the medications as directed unless you experience abnormal symptoms that might be related to medication use. Symptoms such as itching, development of a rash, wheezing, and tightness in the throat could be an allergic reaction. Should these occur, discontinue all medications, and call the office for instructions.

INSTRUCTIONS

- **PAIN:** You will be given a handwritten prescription for pain medication after your surgery. Take the pain medication only as prescribed. We require a minimum of a 24-hour notice if you are requesting a refill of the narcotic. Contact your pharmacy for a refill. There will be no medications prescribed after hours, on weekends, or on holidays. Contact your physician before you start taking aspirin or ibuprofen.
- **ANTIBIOTICS:** Development of an infection is uncommon following a brow lift. Oral antibiotics are not indicated unless you develop signs and symptoms of an infection.
- **NAUSEA:** Scopolamine (Transderm Scope). A patch containing a medication to reduce nausea may be placed behind your ear after your surgery. You may experience mild blurred vision and dilation of the pupil on the side of your head that the patch was placed. This will resolve after the patch is removed. You should remove the patch 24 hours after surgery. Discard the patch and wash your hands thoroughly to avoid contact of the medication with your eyes. If you have trouble with nausea, please call our office for advice.

POSTOPERATIVE INSTRUCTIONS

- If you have bleeding, pain (not controlled by your medication), or swelling (increasing or expanding), call our office at (218) 724-7363, day or night, or go to the Emergency Room.
- You must have a responsible adult stay with you during the first 24 hours after surgery.
- DRESSINGS: Keep your dressings as clean and dry as possible. DO NOT REMOVE THEM UNLESS INSTRUCTED TO DO SO.
- ACTIVITY: TAKE IT EASY during the first week after surgery. You may perform activities of daily living but no matter how good you feel, do not clean the house, go shopping, etc. Light activity such as walking is encouraged but too much activity may cause bleeding and/or more swelling. DO NOT LIFT, PUSH OR PULL MORE THAN 10 LBS.
- COLD COMPRESSES: Use of cold compresses after surgery will help to reduce swelling, bruising, and pain. Apply cold gel packs, frozen peas or crushed ice cubes in a zip-lock bag over the surgical area for a period of 20 minutes at regular intervals during the first 24 – 48 hours after surgery. This should help, not hurt. If the ice feels too uncomfortable, don't use it as often.
- DIET: It is not unusual to experience mild nausea after anesthesia. When you begin eating, start with liquids and bland foods. If those are well tolerated, progress to a regular diet. To avoid exaggerating nausea, take your pain medication with food.
- DON'T SMOKE OR USE NICOTINE PRODUCTS: Smoking reduces the flow of blood through the small vessels in your skin. This can affect wound healing. It is important that you do not smoke until released to do so by your physician.
- ALCOHOL: Alcohol dilates the blood vessels and could increase postoperative bleeding. Please do not drink until you have stopped taking the prescription pain pills, as the combination of pain pills and alcohol can be dangerous.
- DRIVING: Do not drive for at least 24 hours after general anesthesia, IV sedation, or while taking prescription pain pills. You may feel normal and alert, but your judgment and reactions may be affected by the medications.
- POSTOPERATIVE APPOINTMENTS: It is important that you follow the schedule of appointments we establish after surgery.
- FEVER: Measured fever of 101.5 (oral temperature) CALL THE OFFICE at (218)724-7363.

POSTOPERATIVE INSTRUCTIONS – BROW LIFT

- **SLEEPING:** Try to sleep on your back with your head elevated at a 45-degree angle for 3-4 days after surgery. Using 2 pillows to elevate and support your head will help to reduce swelling. Placing a pillow under your knees and arms may help you feel more comfortable in this position. It is more important for you to sleep than to rigidly adhere to this suggestion.
- **SHOWERING:** You may shower as soon as your dressings are removed. Wash and dry the hair around the staples and screws gently.
- **DRESSINGS:** After surgery you will have a head dressing with thick gauze placed over the brow area. Do not remove this dressing. Your physician will remove it in the office 1-3 days after surgery. After this, no further dressings are needed.
- **ANCHORING SCREWS:** If anchoring screws have been used to secure the scalp in the newly elevated position, they will be removed after 10-14 days. They do not cause discomfort while in place or when removed.
- **HAIR CARE:** You should wash your hair with a gentle shampoo. Use a hairdryer on the lowest setting as your scalp sensation may be decreased. Some patients experience a temporary change in the texture and manageability of their hair. Your hair is reacting to surgery and will probably recover naturally within 6 weeks. If you color or perm your hair, plan to have it done before surgery or wait until 6 weeks after surgery for the best results.
- **SCAR MANAGEMENT:** Scars take at least one year to completely heal. During this time, you must protect them from the sun. Always wear sunscreen with an SPF of at least 30 when in the sun or a tanning bed. Most scars heal well without intervention; gentle massage of the scar tissue on a regular basis may help soften the scar more quickly.

AS YOU HEAL

FAMILY & FRIENDS

- Support from family and friends is helpful, but because they may not understand what constitutes a normal postoperative course, their comments may unintentionally create emotional turmoil for you. We will tell you honestly how you are doing and what we expect your result to be. Please trust in our knowledge and experience when we discuss your progress with you.
- After having cosmetic or reconstructive surgery, your friends may be reluctant to bring up and discuss what they believe is a private matter. Patients occasionally feel upset that “no one noticed” or “said anything.” If you feel comfortable discussing your surgical experience, do so openly. When people ask how you are, respond by saying, “I’m recovering from surgery and I’m doing really well.” This lets people know that they may talk freely with you. Often when patients are open, they find that their friends and acquaintances are interested in discussing the subject.

DEPRESSION

- Quite frequently patients experience a brief period of “let down” or depression after surgery. Some may subconsciously have expected to feel and look better “instantly” even though they rationally understand that this will not be the case. Patients commonly question their decision to have surgery during the first few days after surgery. As healing occurs, these thoughts usually disappear. If you feel depressed, understanding that this is a normal phase of the healing process may help you to cope with these emotions.

HEALING

- The capacity and speed of healing varies from person to person. Several factors such as your genetic background, and your overall state of health and lifestyle (exercise, diet, smoking, drinking, etc.) can affect how you heal. Every patient heals at their own rate.
- Another major factor while healing is whether you follow the postoperative instructions that are given to you. Such guidelines are designed to promote the healing process and prevent the occurrence of anything that may interfere with recovery. It is important you recognize that you are a partner in this process and have a responsibility to follow instructions carefully.
- Unexpected occurrences are infrequent. If, however, you experience a setback, we will do everything possible to facilitate your healing. Should an unexpected event occur, it is in your best interest to ally yourself with us. We will support you through any difficulties and assist you in reaching your goal.