

Facial Reanimation Surgery- Periocular (Around the Eye) Procedures

What are periocular procedures?

Many people with **facial nerve paralysis** (partial or total weakness of one side of the face from different causes) experience eye problems. These may include difficulty closing the eye and a droopy eyebrow on the paralyzed (non-moving) side. Periocular procedures can help improve eye closure and **periocular symmetry** (making the two eyes and surrounding structures look as similar as possible). Often, multiple procedures are done at the same time to maximize benefit. These procedures include:

Platinum eyelid weight:

Placing a weight can help people close an eye that won't fully close due to facial paralysis. In this procedure, a small incision is made in the crease (wrinkle) of the upper eyelid. A small weight is sewn in place under the upper eyelid muscle. Platinum weights do not interfere with MRIs if future testing is needed. Figure 1 below shows the incision and figure 2 shows the insertion of the weight.

Figure 1

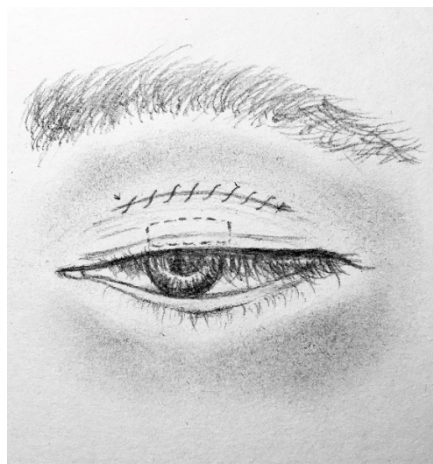
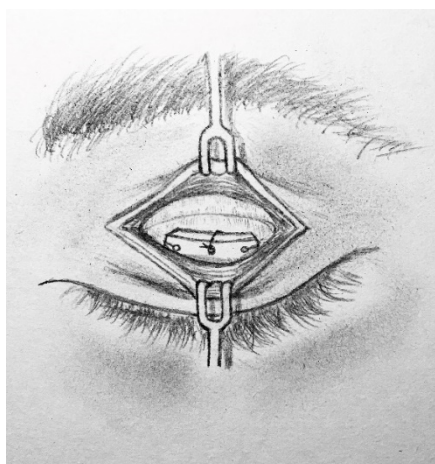


Figure 2



Illustrations by Johnny Y. Xie, MD

Blepharotomy:

Some people who have difficulty closing their upper eyelid can have this procedure to cut the tissue in the upper eyelid to lift the eyelid. This procedure is done with an upper eyelid incision that is either on the eyelid skin or on the inner surface of the eyelid.

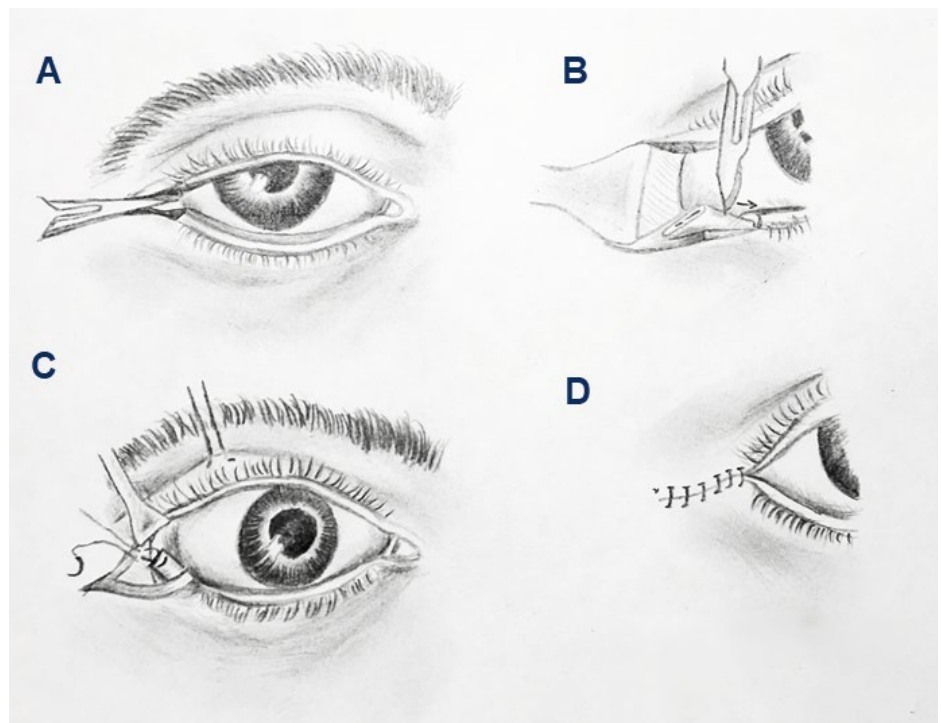
Lateral Canthoplasty:

Some people with facial paralysis can't close their eye because the lower eyelid is drooping. For these people, a lateral canthoplasty (see figure 3 below) can help. This procedure is done through a small incision at the corner of the eye where the upper and lower eyelids meet. A "tuck" of the lower eyelid is then done to help pull the lower eyelid to help the eye close.

Figure 3

Illustration of a lateral canthoplasty in which a small incision is made in the corner of the eye. The lateral canthal tendon is cut, tightened and anchored to the lower corner of the eye socket to help tuck the lower eyelid and help it close.

- A. Making an incision at the corner of the eye
- B. A small segment of a structure called **tarsus** is removed
- C. The tarsus is anchored to the lower corner of the eye socket
- D. The incision at the corner of the eye is closed

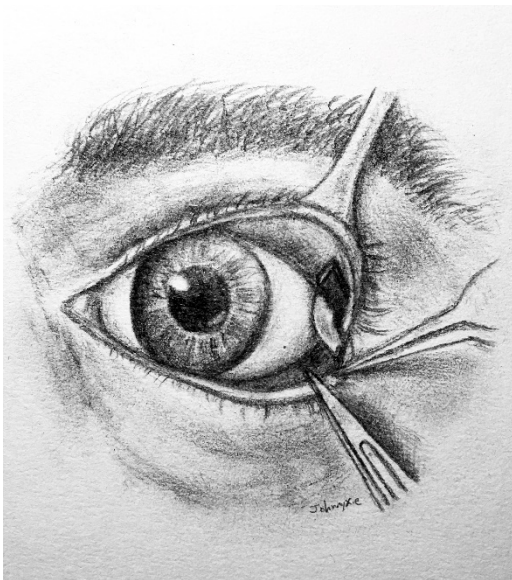


Illustrations by Johnny Y. Xie, MD

Tarsconjunctival Flap

Another option for people with a droopy lower eyelid is the tarsconjunctival flap. This procedure pins the lower eyelid to the upper eyelid to help provide support for a droopy lower eyelid. Small incisions are made on the inside of the of lower and upper eyelids. A small flap of tissue from the inside of the upper eyelid is sewn to the inside of the lower eyelid to help raise the lower eyelid. In the image below tools are used to make room for the knife to cut the tarsconjunctival flap (see figure 4).

Figure 4



Illustrations by Johnny Y. Xie, MD

Brow Lift

Facial paralysis can cause the eyebrow to droop on the paralyzed (non-moving) side of the face. This can be severe enough to cause blocked vision on that side. To fix this problem, a brow lift can be done (see figure 5). This can be done through different incisions. For example: an incision hidden within the eyebrow itself or an incision higher up near the hairline. The location depends on a variety of factors that your surgeon will discuss with you at your preoperative visit.

Figure 5:

Illustration of types of incisions that can be used for brow lift procedures.

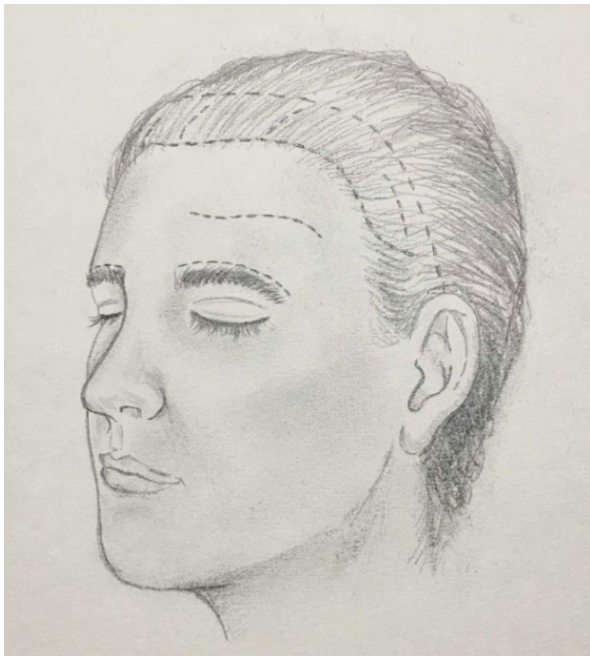


Illustration by Johnny Y.Xie, MD

What do I need to buy before the procedure?

- Vaseline®
- Q-tips®
- Hydrogen Peroxide 3%
- Preservative free artificial tears

What are my instructions before surgery?

- Stop smoking e-cigarettes/cigarettes/recreational marijuana at least 3 months before surgery, or as soon as possible. We are happy to provide resources to help you quit smoking before surgery.
- Stop chewing tobacco 4 weeks before surgery. Ideally you should quit all forms of tobacco permanently before the surgery.
- Do not drink alcohol 24 hours before surgery.

- Be as active as possible, ideally with a regular walking routine. Your goal is a minimum of three 10-minute walks per day. This will help with your postoperative recovery.

What can I expect after the surgery?

- The periocular procedures described above are typically done as outpatient procedures, meaning that you go home the day of the procedure. However, if these are done along with larger facial paralysis surgeries, you may be admitted to the hospital following the surgery.
- You can expect significant swelling and bruising of the eyelid on the paralyzed side.
 - In most people, the eye (or eyes if both eyes are involved in the surgery) swells shut for a few days. Then the swelling starts to improve.
 - Swelling is typically the worst 3 days (72 hours) after surgery and then will gradually start to improve over the next 2 weeks.
 - Although most of the swelling is gone after 6 weeks, in some people swelling and bruising may last longer.
 - People with eyelid weights may notice a mild increase in fullness to the area of the eyelid above the eyelashes, which is where the eyelid weight is placed. The weight is firm and can be felt when you touch the eyelid skin.
- It is very important to keep the eye(s) lubricated after surgery.
 - Unless directed otherwise by your surgeon, you should plan to use preservative-free artificial tears every 4 hours during the day.
 - Your doctor may also ask you to use a thicker eye ointment at night. Or a protective covering over the eye called a moisture chamber which you will receive.
 - Your eyes may feel mildly irritated for the first 1-2 days. Tell your doctor if:

- Irritation is severe
- You have pain
- You have changes in your vision
 - Due to eye dryness, some people may have blurry vision after the procedure. This generally clears with blinking and frequent use of preservative-free artificial tears.
- Numbness in the forehead after brow lift procedures are common. The numbness generally improves over the course of several months, although in some cases may last longer.

What food or fluid restrictions do I have after the surgeries?

Ideally you will be walking, eating and drinking within the first 24 hours after surgery. Please see more information on diet below.

- There are no diet restrictions after your procedure. You may want to avoid heavy meals for the first 24 hours because your stomach may be upset from medications you received during the procedure.
- It is helpful to eat smaller meals 4-6 times day.
- Eat more fiber to avoid constipation.
- You should also drink plenty of water to minimize constipation. Hydration is important.
 - Your goal should be 64 ounces of non-alcoholic beverages per day (preferably water) unless you have pre-existing medical issues that make this dangerous (such as heart failure or kidney problems). If you do have such a pre-existing condition, please follow your specialty doctor's direction on fluid limitations.
- You will need extra protein to help heal and the body needs extra calories during recovery. Visit the following link for information on increasing protein: <http://www.med.umich.edu/1libr/Nutrition/IncreasingProtein.pdf>

What kind of activity can I do after the surgery?

- Take gentle walks for 10 minutes at a comfortable pace every 3-4 hours while awake. This promotes better healing and decreases swelling and the risk of a possible blood clot.
- Do not lift anything greater than 10 pounds for 2 weeks. (For reference, a gallon of milk is 9.2 pounds).
- Do not perform any strenuous aerobic activity (such as running or biking) until cleared by your surgeon, typically 2 weeks after surgery.
- Keep your head elevated as much as possible for the first 3 days after surgery.
- When you sleep, keep your head propped up on 2-3 pillows or if more comfortable, sleep in a reclining chair.

How will I take care of the surgery sites?

- Wash your hands before any post-surgical care.
- Keep the surgical area clean and uncovered (open to air) as much as possible.
- Clean incisions twice per day with baby soap and water.
 - After each cleansing, blot incisions dry and then place a thin coat of Vaseline. In some cases, you may be prescribed eye ointment as part of your incision care.
 - Your surgeon will advise you before you leave the hospital if any special eye drops or ointments are needed.
- You can shower 24 hours after surgery. Soap and water may run over the sites.
 - Do not let the shower spray hit the incisions directly.
 - No baths, hot tubs, or swimming until your surgeon confirms it is okay.
- Sutures placed may be absorbable (will dissolve on their own) or may need to be removed (non-absorbable).

- If you have non-absorbable sutures these will be removed at your first postoperative appointment, usually 5-10 days after surgery. This appointment will be arranged before you leave the hospital.

How do I manage pain at home?

Medications

- You will receive information about your prescribed medications including the actions, dosage and side effects, from a nurse at the time of your discharge.
- Limit your use of narcotics (opioids). These drugs can have serious side effects. You will be required by Michigan law to sign a consent form before going home with a narcotic prescription.
- We encourage the use of Tylenol (**maximum of 3000 mg/day**) unless you have a liver condition, in which case you should speak with your doctor first.
- Ask your doctor before using an NSAID (brand names: Motrin, ibuprofen, Aleve) or before using aspirin as these can increase bleeding risk.
- **Do not** drink alcoholic beverages, operate machinery, or drive a car while taking prescribed narcotic pain medications.
- If taking narcotic pain medication, please do the following to minimize constipation:
 - Take a gentle stool softener such as Colace 100mg twice a day, which is available over the counter (without a prescription).
 - Try to increase fiber choices in your diet

Ice

Use ice to manage your pain using the instructions below. Be sure to wrap the ice in a cloth to avoid possibly injuring the skin.

- Ice the area around your eye for 20 to 30 minutes every 3-4 hours while awake.

- Do this for the first 2-3 days after surgery to help minimize pain and swelling. Do not place ice directly on the surgical site, it may be placed as close to 2 inches away from any incision.
- You can continue to ice after 3 days if you find this comforting.

When can I return to work?

- This will be determined by the surgeons and will vary with the type of work you perform. Please discuss this with your doctor before going home from the hospital.
- Please fax papers to: (734) 998-2938 and be sure to include your full legal name, date of birth and doctor's name on these papers. Disability papers will be processed as received and can take up to 7 business days.

When should I call the doctor?

Call your doctor if you notice any of the following symptoms:

- New or increasing redness on your incision(s).
- New or increasing swelling of your incision(s).
- New or increasing separation of your incision(s).
- Increasing or foul smelling drainage from your incisions.
- Pain not controlled by pain medication when used as directed.
- Significant pain with movement, especially the surgical limb.
- Any temperature over 101 degrees Fahrenheit taken by mouth
- Redness or swelling in either lower leg. This can be a sign of a rare but serious side effect of surgery called a deep venous thrombosis (DVT) or blood clot. Notify your doctor immediately if this develops so that they can further direct you.
- New or worsening shortness of breath.
- New or worsening chest pain.

What is the contact information?

- Monday-Friday from 8am-5pm:
 - Call Otolaryngology nursing (Team 4) at (734) 615-8838
- After hours, on weekends, or on holidays:
 - Call hospital paging at (734) 936-6267 and ask for the Otolaryngology (ENT) resident on-call.

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Reviewed by: Shannon Rudy MD
Edited by: Karelyn Munro BA

Patient Education by [Michigan Medicine](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License](#). Last Revised 02/2021