

TMJ PROCEDURES: ARTHROCENTESIS /ARTHROSCOPY

BOTOX OF JAW MUSCLES

JOINT REPLACEMENT

TWO bones form a joint. TMJ stands for TEMPOROMANDIBULAR JOINT. TEMPORO is for the TEMPORAL BONE or the upper bone of the joint. MANDIBULAR refers to the lower jaw or the lower bone of the joint. You may have heard of the term CONDYLE. The CONDYLE is the part of the MANDIBLE that forms the joint.

Here you can find:

- ✓ **General Description**
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- ✓ **Videos: <https://myoms.org/>**
- ✓ **FAQ: Frequently Asked Questions**
- ✓ **Postoperative Instructions**
- ✓ **Physical Therapy Program**

ARTHROCENTESIS/ARTHROSCOPY

Dr. Heffez was one of the innovators of these techniques for the TMJ. They have replaced many of the radical surgical procedures.

ARTHROCENTESIS: Is a procedure by which two needles are placed in the joint for flushing its contents, manipulating the joint and depositing some medication. The procedure is usually performed in conjunction with intravenous anesthesia.

ARTHROSCOPY: Is a procedure used to diagnose and treat the joint using a small telescope.

Both procedures are used to treat CLOSED LOCK or the sudden inability to open the mouth. They are also used to treat a very painful arthritic joint. Before surgery you will have obtained an MRI to determine the position of the articular disk or cushion that sits between the bones of the joint. The disk is usually dislocated out of position. **These procedures do not reposition the articular disk.** Once the disk is displaced, it is usually considered permanently dislocated. The tissue behind the joint (a ligament) now serves as your cushion. We use the term PSEUDO-DISK to describe its new function. With time, the PSEUDO-DISK becomes a scar. Both procedures are performed under intravenous anesthesia.

CLOSED LOCK is due to a constellation of #3 factors:

1. Position of the disk or conformational change of the disk blocking the opening of the jaw. This is the least important factor.
2. Poor or inadequate amount of lubrication of the joint. A fluid called SYNOVIAL FLUID lubricates joints. The tissues behind the disk produce synovial fluid. These are the tissues that stretch forward as the disk gets displaced and that become the PSEUDO-DISK. The result is a stickiness in the joint that does not allow the jaw to glide smoothly over the parts.
3. Muscle Spasm. Muscle spasm may occur from a grinding or clenching of the teeth habit. The muscles become tight not allowing the jaw to jump over the displaced blocking disk. The muscles are like tight elastic bands. The tighter they get, the harder it is to get around the displaced disk. The tighter the muscles, the louder the joint noise as your jaw jumps around the displaced disk and slams back upward. This is one of the reasons why you may experience louder noise than at other times.

Dr. Heffez will need to examine you to determine which of those three factors are the most important factors in your case. **ARTHROCENTESIS** is used to treat #2 **Poor or inadequate amount of lubrication of the joint.**

Medication and Bite Appliances are used to #3 **Muscle Spasm.**

✓ **FAQ: TMJ ARTHROCENTESIS**

HOW SOON WILL MY JAW OPEN UP AFTER THE PROCEDURE?

Typically, your jaw will immediately open up in the Closed Lock situation. You will not keep the entire gain in opening. However, you will be able to open more comfortably to a greater mouth opening. Do not get fixated on a magical number for opening. Your comfort is more important. For example, while a normal mouth opening may be 40-55mms you may need up opening to 35mms. This is more than adequate. Remember that joints get into trouble when they function in the extreme ranges of motion. Keeping the jaw opening at 35 mm usually keeps it out of trouble. **MANY TIMES**, the procedure converts a situation in which your jaw used to be able to jump around the displaced disk to a situation where it simply pushes it further forward or out of the way. This is a better result than one in which you resume the clicking by jumping around the displaced disk. In the latter situation you may develop Closed Lock again.

WHAT IF I DON'T OPEN UP IMMEDIATELY?

Sometimes the opening will gradually increase over a month period of time.

IS THIS A PAINFUL PROCEDURE?

Patients they are sore for two weeks after the surgery. They feel like a bruise in front of their ears where the joints are located. Patients typically miss 1-2 days of work.

WHAT CAN I EAT AFTER SURGERY?

You have no diet restrictions. You are encouraged to chew gum and eat hard food immediately after surgery. Eating is a form of physical therapy. Once you attain the desired mouth opening you will be asked to restrain from very chewy foods.

WILL I BRUISE?

Rarely patients will bruise in front of their ear. The bruise will turn green and yellow and eventually fade away. If it develops, it will take about 1-2 weeks to resolve. In older patients, a bruise may take much longer to resolve.

WHAT MEDICATION WILL I NEED TO BE ON AFTER SURGERY?

You may be prescribed an antibiotic and an anti-inflammatory agent like Ibuprofen. A narcotic is prescribed for the first few days.

✓ **POSTOPERATIVE INSTRUCTIONS**

1. Bleeding: Some oozing of blood may be noted in front of the ear for 24-48 hours, this is normal and of no concern. Persistent bleeding over 48 hours, or profuse bleeding at any time should immediately be reported to your doctor. May notice blood in the area surrounding the ear in the first 24 hours. It may look like that there is bleeding from your ear. Your pillow case may be stained with blood in the morning. This is not usually of any concern.

2. Diet: There are no dietary restrictions you are encouraged to chew and eat any foods that you can tolerate. Freely use jaw. There are no food restrictions. You may chew gum in large pieces (bubble gum). Chewing and exercise of the jaw is encouraged for maximum benefit.

3. Anesthesia: Patients who have received a general anesthesia should:

- A. NOT drive a vehicle or operate any machinery within the same day of surgery,
- B. NOT undertake any responsible business matters within the same day of surgery,
- C. NOT drink any alcohol on day of surgery,
- D. NOT take any medication without approval.

4. Pain: Pain is to be expected and may be severe for the first few hours. One **MUST:**

- A. Take the prescribed medication before the anesthetic wears off, and the pain becomes evident, usually one hour following the procedure.
- B. Take the medication to relieve pain. If dizziness or weakness is experienced, you should lie down.

- C. Approximately 45 minutes should be allowed for you to become aware of the effect of pain medication.

Call if you have any questions concerning any reactions.

5. Swelling: Swelling is to be expected and may reach its maximum up to three days after surgery, but it is no cause for alarm.

Swelling may be reduced by:

- A. Applying an ice bag or chopped ice to the operated area 15 minutes on and 15 minutes off as possible during the first 48 hours. After 48 hours substitute a hot water bottle or hot towel in the same manner until swelling has receded. **CHECK THE TEMPERATURE OF THE HOT PACK ON YOUR WRIST BEFORE PLACING THE PACK ON YOUR FACE, IN ORDER NOT TO BURN YOURSELF.**
- B. Keep your head slightly elevated when lying down (i.e. extra pillow or two).

6. **Bruising** may occur, sometimes the bruise is a deep purple. The bruise, if it occurs, can take up to 3 weeks to disappear. This should not be cause for alarm and should disappear within 10 days. You may have a slight earache. Should this become worse after several days, call the office.

7. Occasionally following surgery, unrelated complications may occur (tonsillitis, flu or cold). This is due to the fact the patient's resistance may be low prior to or following surgery. If you feel run down or have not eaten or slept for several days, it is wise to avoid crowds, drafts and get as much rest as possible. **EVEN, IF YOU FEEL WELL AND STRONG, DO NOT WORKOUT OR PERFORM AEROBIC EXERCISES UNTIL YOUR DOCTOR ALLOWS YOU TO.**

8. **Nausea** rarely occurs and may be avoided by taking pain medication with a glass of milk. If nausea is severe, stop taking the prescribed medication and switch to an acetaminophen based (Tylenol) medication. If pain is severe, call the office.

9. Antibiotics (Penicillin, etc.): **YOU MAY BE PRESCRIBED ANTIBIOTICS.** IF SO, take it for the exact length of time indicated on the bottle. Antibiotic medication may decrease the effectiveness of birth control pills. Therefore, patients taking birth control pills who have been prescribed antibiotics should use an additional method of contraception during the remainder of the contraceptive cycle.

10. IF ANY UNUSUAL SYMPTOMS OCCUR OR IF YOU HAVE ANY QUESTIONS CONCERNING YOUR PROGRESS. PLEASE CALL THE OFFICE.

✓ **POST-ARTHROCENTESIS SURGERY Physical Therapy Program**

PURPOSE: These exercises are designed to increase the mobility of your jaw and improve jaw function.

PRECAUTIONS: The exercises should be done gently, never forcefully, and should not cause excessive pain. If any of the exercises cause undue pain, discontinue them for a short time, then gently start them again.

INSTRUCTIONS: Start with five (5) repetitions and increase to twenty (20) repetitions for each exercise. Do entire sequence of exercises three (3) times daily.

EXERCISE ROUTINE:

1. Stretch jaw by placing thumb on upper teeth and index finger on lower teeth. Gently stretch mouth open in this manner.
2. Jut jaw forward by opening mouth slightly and moving the lower teeth in front of the upper teeth.
3. Jut jaw forward by opening mouth as in step 2. Then with the jaw jutting forward open your mouth as wide as possible.

FREQUENCY OF PHYSICAL THERAPY: Do the exercises everyday of the week.

OTHER SPECIAL INSTRUCTIONS:

1. Follow the diet that most suits you. Increasing the consistency as soon as possible is to your advantage.
2. Gum chewing (sugarless) will help in between exercises.

BOTOX

When the jaw muscles simply cannot relax using medication or an appliance, Dr. Heffez uses Botox to relax the muscles. This is not a permanent solution as the Botox last 3-5 months. But by breaking the cycle of pain, the effect is usually much longer than 3-5 months.

Sometimes, from overactivity of the jaw muscles, the muscles begin to bulk out. This can be unsightly, and Botox helps to reduce the size of these muscles.

Botox is also used in the management of atypical facial pain. Select areas are targeted with Botox to help relieve pain and avoid the use of strong, debilitating pain medications.

JAW JOINT REPLACEMENT

Jaw Replacement is a last resort treatment in the arthritic joint. There are basically two approaches: reconstruction with your own bone tissues or reconstruction with synthetic tissues. There are advantages and disadvantages to both techniques.

In the patient who is born with a facial deformity such as Hemifacial Microsomia or Goldenhar Syndrome is best treated with his or own bone and cartilage tissues because these patients need their jaw to continue growing. In the patient who has severe arthritis of the jaw joint, continued growth is not a concern. This patient can be treated either with their own tissues or with a prosthetic (synthetic) joint. The surgery does involve incisions on the skin, but they are placed in concealed areas and the skin is closed with a plastic closure.

Dr. Heffez has described and published in the Journal of Oral and Maxillofacial Surgery an innovative approach to reconstructing the joint:

The Inverted Coronoid Ramus Graft to reconstruct the Temporomandibular Joint. This technique uses your own bone and is minimally invasive. Visit the **SHOW ME** tab to see how this technique is carried out.