

Common Injections for Optometric Eye Care

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Financial Disclosures

- Lumenis
- InMode

- All relevant relationships have been mitigated
- The content of this activity was prepared independently by me—Dr. Carpenter
- The content and format of this course is presented without commercial bias and does not claim superiority of any commercial product or service

Why should I do injections?


- To give patients another treatment option
- To decrease the time that a patient may have to wait to get a chalazion surgically removed
- To expand your skills
- Gives patients a less invasive alternative to surgical removal
- To add another service to your practice



How effective are injections for Chalazions?


- They are most effective if the chalazion is less than 6 mm in size and less than 6 months old
- For smaller chalazia resolution is about 85% after 1 injection and 99% after 1-2 injections
- For larger chalazia resolution is about 59% after 1 injection and 80% after 1-2 injections

UAB School of Optometry 2011



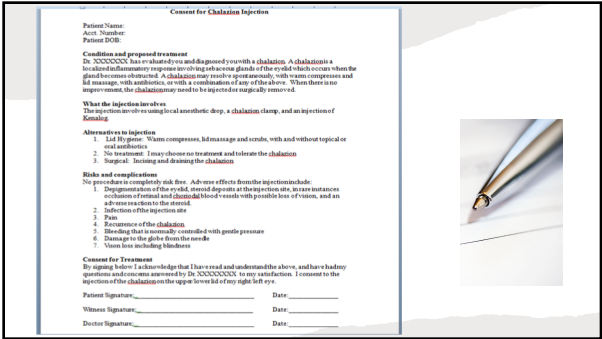
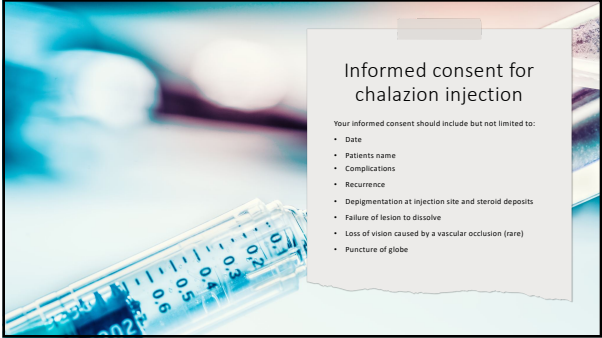
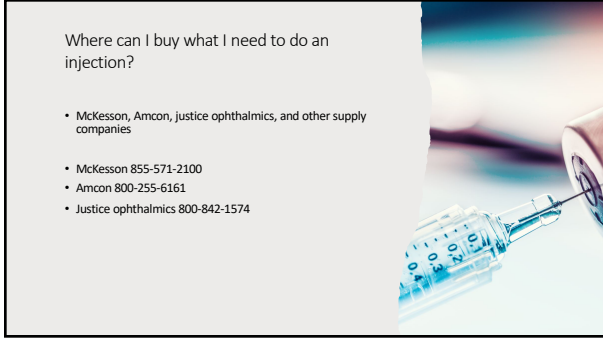
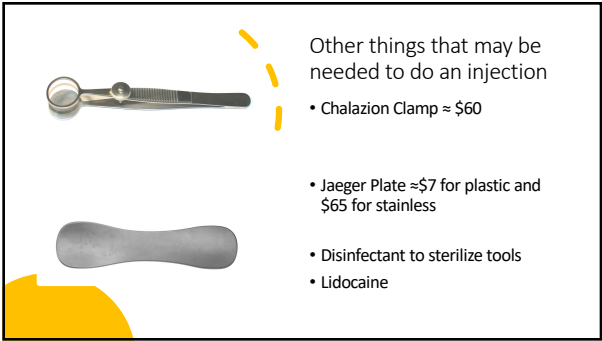
What do I need to do an injection?

- Informed consent
- Gloves
- 25-27 gauge 1/2" needles -\$4.91 for 100 pack
- Syringe with leur lock -\$5.16
- Alcohol or iodine swab
- Medication eg. Kenalog -\$80 for 10 ml bottle
- Proparacaine
- Sharps container-\$10
- Gauze



27 G Needle





Before I inject I should:



- Explain to the patient what they should expect
- Make sure they do not have an allergy to the medications
- Make sure there is not an active infection
- Ask the patient how long the chalazion has been on their lid. If longer than six months injections are less successful
- Make sure to have an informed consent signed

How much should I inject?

- Get as much kenalog into the lesion as you can. Usually between 0.1-0.5 cc
- You can inject multiple locations, if the lesion is large enough
- Do not inject outside or around the lesion. This increases the chance of depigmentation and steroid deposits



Contraindications to chalazion injections



- African American or darkly pigmented patients
- Warn strongly of depigmentation in children
- Known hypersensitivity to any of the medications
- Recurrent chalazion requiring biopsy

Side Effects

- Cutaneous atrophy
- Steroid deposits under the skin
- Skin depigmentation
- CRAO
- Ecchymosis



After I inject I Should:



- Document the date, time, amount of medication used, patient condition eg. Patient tolerated the procedure well with no complications

When should I see the patient back and how often should I inject a chalazion?



- See the patient back in 1-2 weeks. If the chalazion is at least 50% smaller advise the patient to return only if it does not go away.
- If after 2 weeks the chalazion is not smaller you can reinject the chalazion.
- Larger chalazion (greater than 6mm in size) may require multiple injections.

Billing for intralesional injections

Jcode: J3301
triamcinolone
acetonide 10 mg

Procedure code:
11900 Injection

Diagnosis codes intralesional injections

H00.11-
H00.19
Chalazion

H00.21-
H00.29
Hordeolum

Case # 1

- 59 yo WM
- CC: Bump on inside of RLL x 2-3 months causing irritation
- VAcc: OD 20/20 OS 20/20
- IOP: OD 15 OS 17
- SLEx: Lids 1-2+ blepharitis OU, non-tender 4-5 mm bump on lower lid

Chalazion



Treatment Options

Do nothing

Warm soaks and massage

Injection

Surgical removal

Intense Pulsed Light therapy (IPL)

Radiofrequency therapy(RF)

Treatment


- Patient did not want to have lesion surgically removed and elected to have an injection
- Injected 0.2 cc of kenalog 40 into chalazion and scheduled follow up with the patient in 2 weeks. Started the patient on erythromycin ung tid OU with lid scrubs and soaks bid for the blepharitis.
- Patient returned in 2 weeks and the chalazion was 80% smaller and the patient was no longer having any irritation. The blepharitis was reduced to trace.
- Advised the patient to call if the chalazion did not resolve. Asked the patient to continue lid scrubs daily and to d/c the erythromycin in 1 week. Patient called back in 1 week and said the bump was completely gone.

Case #2

- 85 yo WM
- CC: Bump on upper and lower lid of OD. The upper lid bump has been there for 1 month and is causing his lid to "droop", the bump on the lower lid has been there for years. Both are non-tender.
- VAcc: OD 20/30 OS 20/25
- IOP: 18 OD 18 OS
- SLEx: non-tender bump on RUL 9 mm in size and non-tender bump on RLL 6 mm in size

Treatment Options

- Do nothing
- Warm soaks and message
- Injection
- Surgical removal
- Intense Pulsed Light therapy (IPL)
- Radiofrequency therapy(RF)



Treatment


- Patient did not want to have lesion surgically removed and elected to have an injection
- Injected 0.2 cc of kenalog 40 into both chalazion and followed up with the patient in 2 weeks. Advised the patient to use warm soaks and massages bid.
- Patient returned in 2 weeks and there was a 50% decrease in both chalazion. The patient was no longer having the drooping of the upper lid.
- Scheduled the patient to return in 2 weeks. The chalazion were no smaller. I reinjected the chalazion and rescheduled the patient for 2 weeks.
- Upon return visit the upper chalazion had resolved, but the lower chalazion was unchanged. The patient was happy and did not want another injection or surgery to remove the lower chalazion.

Case # 3

- 30 yo WM
- CC: Bump on LLL x 2-3 months causing irritation, comes and goes, very sore today
- VAcc: OD 20/20 OS 20/20
- IOP: OD 12 OS 13
- SLEx: Lids 1-2+ blepharitis OU, tender 5-6 mm bump on lower lid

Treatment Options

- Do nothing
- Warm soaks and message
- Injection
- Surgical removal
- Intense Pulsed Light therapy (IPL)
- Radiofrequency therapy(RF)



Treatment

- Patient returned in 2 weeks and the tenderness had resolved but the bump was still there. Patient wanted to have an injection to resolve the hordeolum.
- Patient returned 2 weeks later and the hordeolum had resolved.
- 1 month later the patient returned with another hordeolum. It was only 3mm in size. Again the lid was tender and causing the patient discomfort. When I reevaluated the lids I noticed cylindrical cuffing around the lashes.
- Advised the patient to start claridex bid and tobradex qid x 1 week

Collarettes



Collarettes (flakes) on the eyelashes in anterior blepharitis

Treatment

- Patient returned in 1 week and the tenderness had resolved and the hordeolum was smaller. Advised the patient to continue using warm soaks until the hordeolum resolved and cliradex bid for 3 weeks then qd for 2 months.
- Patient returned in 6 weeks and had complete resolution of the hordeolum, demodex, and the blepharitis
- With the emergence of lotilaner ophthalmic solution 0.25% (Xdemvy) is an option also. The recommended dosage is one drop in both eyes bid for 6 weeks

Case #4

- 9 YO WF
- CC: Bump on RLL x 2 weeks, was painful but now just a bump
- VAcc: OD 20/20 OS 20/20
- IOP: OD 12 OS 13
- SLEx: Lids trace blepharitis OU, 4 mm bump on lower right lid

Treatment Options

Do nothing

Warm soaks and massage

Injection

Surgical removal

Intense Pulsed Light therapy (IPL)

Radiofrequency therapy(RF)

Treatment


- After talking to the patient and mom we decided to do a Kenalog injection
- Informed consent was signed and I explained to patient everything that was going to happen. She was apprehensive but very eager to get the bump resolved.
- Injected 0.1 cc of Kenalog into the chalazion. The patient tolerated the procedure well and did better than most adults. I had the patient return in 2 weeks.
- Patient returned in 2 weeks with complete resolution of the chalazion

Case #5

- 73 YO BM
- CC: 2 Bumps on LUL for 2-3 months
- VAcc: OD 20/25 OS 20/30
- SLEx: No blepharitis, 2-3 mm bumps on LUL

Treatment Options

- Do nothing
- Warm soaks and message
- Injection
- Surgical removal
- Intense Pulsed Light therapy (IPL)
- Radiofrequency therapy(RF)



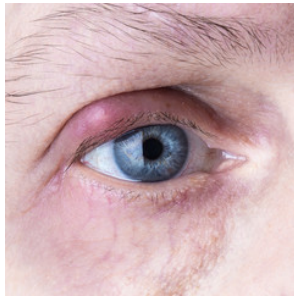
Treatment

- After talking to the patient about his options and the potential for depigmentation, he decided to have an injection to try to resolve the chalazion.
- Injected 0.2 cc of Kenalog 40 into each chalazion and followed up with the patient in 2 weeks. Advised the patient to use warm soaks and massages bid.
- Patient returned in 2 weeks and the chalazion had resolved but he did have a small amount of pigment changes on his lid that he was not upset about. He was happy he no longer had the bumps on his lids.

Case #6


- 56 YO WM
- CC: 1 Bump on RUL for 1 month
- Vacc: OD 20/20 OS 20/20
- SLEx: No blepharitis, 1--5mm bump on RUL
- Patient reported his daughter was getting married in 2 weeks and he wanted to make sure the bump was gone.

56 YO WM



Treatment Options

- Do nothing
- Warm soaks and message
- Injection
- Surgical removal
- Intense Pulsed Light therapy (IPL)
- Radiofrequency therapy(RF)



Treatment

- We decided to do an IPL over the chalazion and inject the chalazion the same day
- I used a lumenis M22, Fitzpatrick level 2 settings, with the acne filter
- I injected 0.1 cc of Kenalog 40 into the chalazion. I also prescribed loteprednol 0.5% gel qid and warm soaks bid-qid
- I saw the patient back in 1 week and the chalazion had resolved by about 50-60%, I repeated the IPL that day. Advised him to continue the drops and warm soaks
- The patient called the day before his daughters wedding and said it was resolved.

What should I do????



What should I do????



What is wrong with this picture????



What should I do????



What should I do????



What should I do????






Aesthetics

- Botulism toxins
- Why should I perform them?
- What do I need to perform these injections?
- Will patients come to me for these injections?
- Will insurance pay for these injections?
- How do I begin to incorporate aesthetics into my practice?




Why should I perform aesthetic injections in my practice?

- To practice at the full level of your training
- To give your practice diversity
- To differentiate your practice
- Another income source



What you need to purchase to incorporate aesthetic injections into your practice

- 31 G needles and 1 ml syringes eg. Insulin syringe
- Sharps container
- Surgical gloves
- Alcohol Swabs
- 2x2 or 4x4 gauze pads
- Sterile sodium chloride
- 18-23 G Drawing needle and 5 ml syringe
- The botulism toxins of your choice



Know your concentrations and number of units that each toxin is equivalent to!!!

- Most of the toxins have to be reconstituted and you need to know the concentration of the toxin. If you make it more or less concentrated you need to know how many units of the toxin are in the amount you inject into the patient. Different toxins may require more or less units to give the practitioner and the patient the desired results.

INFORMED CONSENT FOR BOTULINUM TOXIN TREATMENT

DATE: _____ **PATIENT:** _____

DATE OF BIRTH: _____

ADDRESS: _____

PHONE: _____

The purpose of this informed consent form is to provide written information regarding the risks, benefits and alternatives of the procedure being performed. This document should be read and understood by the patient prior to the procedure. It is important that the patient understands the risks, benefits and alternatives of the procedure. The form is written in plain language and is intended to be read and understood by the patient. The form is written in plain language and is intended to be read and understood by the patient. The form is written in plain language and is intended to be read and understood by the patient.

THE PROCEDURE: Botulinum toxin (Botox) and other agents are a neurotoxin produced by the bacterium Clostridium botulinum. Botulinum toxin acts on the neuromuscular junction of the nerve and muscle cells, blocking the release of acetylcholine at the neuromuscular junction. This results in a temporary paralysis of the muscle. Botulinum toxin is used to treat a variety of conditions, including wrinkles, muscle spasms, and certain types of migraines. Botulinum toxin is used to treat a variety of conditions, including wrinkles, muscle spasms, and certain types of migraines. Botulinum toxin is used to treat a variety of conditions, including wrinkles, muscle spasms, and certain types of migraines.

RISKS AND COMPLICATIONS: Botulinum toxin is a neurotoxin and can cause weakness, blurred vision, and difficulty swallowing. Botulinum toxin can also cause a temporary paralysis of the muscle. Botulinum toxin can also cause a temporary paralysis of the muscle. Botulinum toxin can also cause a temporary paralysis of the muscle.

PRECAUTIONS, CONTRAINDICATIONS AND ALTERNATIVE TREATMENTS: Botulinum toxin should not be used in patients with a known hypersensitivity to botulinum toxin or any of its components. Botulinum toxin should not be used in patients with a known hypersensitivity to botulinum toxin or any of its components. Botulinum toxin should not be used in patients with a known hypersensitivity to botulinum toxin or any of its components.


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CONSENT: I, the undersigned, do hereby consent to the procedure described herein and understand that I am responsible for my own actions and decisions. I understand that I am responsible for my own actions and decisions. I understand that I am responsible for my own actions and decisions.

SIGNATURE: _____

DATE: _____

Botox consent form



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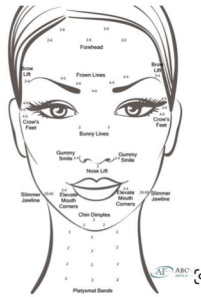
SIGNATURE: _____

DATE: _____

Botox consent form



Injection areas



FYI

- Make sure to remove all make up and clean the areas to be treated with alcohol prior to treatment
- When injecting the crows feet do not inject towards the eye!
- Stay about one inch above the brows to reduce the chance of ptosis
- Try to only inject 5 times with the same needle.
- Treat your staff and family first to become more confident
- Less is more, start conservative
- You can always add more in a couple weeks if needed



FYI

- Make sure to not allow the patient to dictate the procedure
- If you do cause a ptosis it will resolve in 3 months
- When loading the needle do not touch the needle to the container of the botulism. It will dull the needle
- Give yourself plenty of time between patients at first
- You will bruise patients
- Advise patients to not do strenuous exercises for at least 4 hours after the injection



FYI

- Inform the patient to not rub or massage the injection areas after the injection
- Inform the patient to not lay down for the first several hours after the injection
- YouTube has a large variety of videos to help you become more comfortable with injection areas and techniques
- Make sure you review the muscles of the areas you are going to inject and how they function and how the toxin will affect that muscle



Lumps and Bumps

- If your state law allows you to do minor surgical procedures you may need to inject an anesthetic prior to performing these procedures

Vaccinations

Some states allow Optometrists to administer vaccinations



