Beyond Wrinkles: Botox and the Management Of Migraine Headaches
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- Recognize the constellation of migraine symptoms that aid in identifying the migraine trigger site and trigger point release
- Review types of migraine headaches and the nerve compression associated with them
- Describe the use of Botox injections as a treatment modality for migraine headaches
- Discuss the selection process of choosing Episodic Migraine candidates

Dr Bahman Guyuron’s Experience
- Late 1980’s
- Craniofacial Patients
- Pediatric Ophthalmologist

Other Indications
- Strabismus
- Blepharospasm
- Hyperhidrosis
- Muscle Hypertrophy

Discovery of Surgical Treatment of MH
- Cleveland: 17 studies (7 anatomical and 10 clinical)
- Texas, Kansas, Washington DC, Austria

Migraine Headaches
- Episodic, severe
- Incapacitating
- Commonly unilateral
- With or without aura
- Associated with nausea, vomiting, photophobia

HIS Criteria
- A- 5 attacks of headaches
- B-lasting 4-72 hours
C- Two of the following:
  - Unilaterally
  - Pulsating
  - Moderate to severe
  - Aggravated by activity

D- One of the following:
  - Nausea/vomiting
  - Photophobia/phonophobia

Theories
- Widely accepted
  - Central
  - Vascular origin
  - Based on PET scan
- Current theory
  - Neuronal hyperexcitability during the interictal phase
  - Cortical spreading depression as the basis of aura
  - Trigeminal nerve activation at a peripheral and central origin that accounts for the headache
  - Progressive central sensitization possible related to periaqueductal gray matter damage

Common Grounds between Botox and Surgery
- Glabellar muscles compressing the supratrochlear and supraorbital nerves
- Why does Botox injection fail?
- Why do plastic surgeons have a high success rate with Botox
- Knowledge of anatomy and proper pre-injection screening

4 Common Trigger Sites
- Frontal
- Temporal
- Occipital
- Rhinogenic

Choosing Episodic Migraine Candidates

Intractible headaches
- Disability despite modification of triggers and lifestyle
- Preventative medication failure
Abortive medication failure

Pre Injection
- History and physical to include neurologic exam
- Imaging for headaches with
- Change in character
- Abnormal neurologic exam
- Unresponsive to first line therapy
- Past medical history
- Lab evaluation for possible secondary causes of headache

Botox Injection
- Choosing the right site limits the amount and cost of Botulinum Toxin needed
- Inject the most common trigger site first
- One month diary
- Injection maximum- 3 injections within 3 months

Complications of Botox
- Rare eyelid ptosis
- Hourglass deformity
- Early fatigue during neck extension
- Diplopia