



Gina Mangin, MPAS,
PA-C

Bippity Boppity Boo
Get Ready For My

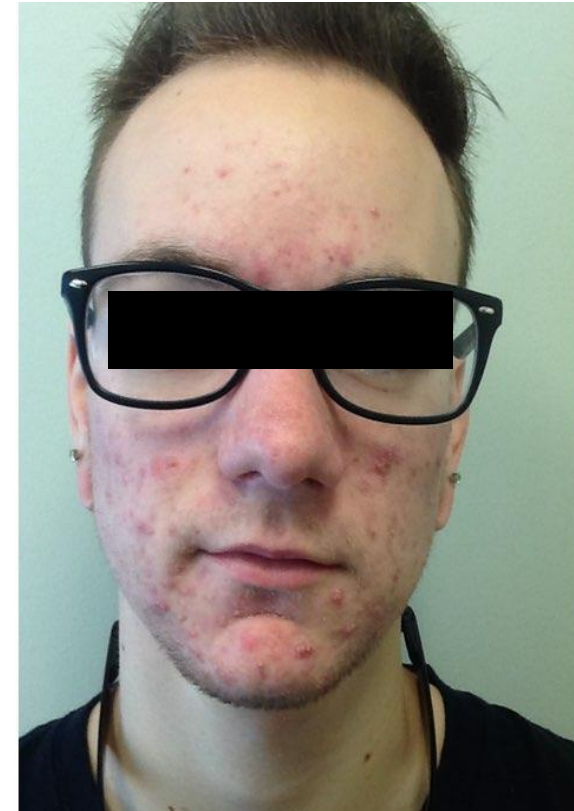
Zoom

Disclosures

- Speaker for Abbvie
- Speaker for Regeneron Sanofi- Genzyme
- Speaker for Dermavant
- Ad Board Consultant for Arcutis
- Ad Board Consultant for Amgen
- Ad Board Consultant for Bristol Myers
- Ad Board Consultant for Lilly
- Ad Board Consultant for Johnson and Johnson
- Ad Board Consultant for Incyte
- Ad Board Consultant for Leo



Acne



Acne



- 50 million suffer from acne
- 16.2 million treated by a physician
- 2.7 million see a dermatologist
- Teenagers
- Women (30-40 yrs)

Why Treat Acne



- Scars/prevention
- Embarrassment
- Lower self esteem
- Psychological Stress
- Socioeconomic impact

Acne



- Papules
- Pustules
- Nodules
- Comedomes

Papules and Nodules



Pustules



Comedomes



Causes of Acne



- Hormones
- Inflammatory cascade
- Follicular hyperkeratization
- Proliferation of C.acnes
- *****Multifactorial*****

Contributing Factors to Acne



- Diet
- Products
- Makeup
- Genetics

Acne Classification



Mild

- < 20 comedones
- < inflammatory papules
- Total lesion count < 30

Moderate

- 20-100 comedones
- 15-50 inflammatory papules
- Total lesions 30-125

Severe

- > 5 cysts
- Total comedones >100
- Total inflammatory >50
- Total lesion count > 125

What to use????



Acne Treatments



- Retinoids
- Benzyl Peroxide
- Glycolic Acid/Salicylic Acid
- Sulfur Sodium sulfacetamide
- Azelaic Acid
- Dapsone
- Clascoterone
- Antibiotics
- Isotretinoin

AAD Guidelines

	Mild	Moderate	Severe
1st Line Treatment	<p>Benzoyl Peroxide (BP) or Topical Retinoid -or- Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic</p>	<p>Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic -or- Oral Antibiotic + Topical Retinoid + BP -or- Oral Antibiotic + Topical Retinoid + BP + Topical Antibiotic</p>	<p>Oral Antibiotic + Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic -or- Oral Isotretinoin</p>
Alternative Treatment	<p>Add Topical Retinoid or BP (if not on already) -or- Consider Alternate Retinoid -or- Consider Topical Dapsone</p>	<p>Consider Alternate Combination Therapy -or- Consider Change in Oral Antibiotic -or- Add Combined Oral Contraceptive or Oral Spironolactone (Females) -or- Consider Oral Isotretinoin</p>	<p>Consider Change in Oral Antibiotic -or- Add Combined Oral Contraceptive or Oral Spironolactone (Females) -or- Consider Oral Isotretinoin</p>

Retinoids



- Prevent comedone formation by regulating keratinocyte proliferation and differentiation
- Anti-Inflammatory effects
- SE: redness, dryness

Retinoids



- Trifarotene
- Tretinoin
 - 0.025%, 0.05%, 0.1%
 - Retin-A, Ziana, Veltin, Atralin
- Adapalene
 - 0.1%, 0.3%
 - Differin
- Tarazotene: gel and cream
 - 0.05%, 0.1%
 - Tazorac, Fabior foam

How to use a Retinoid



- Start pea size/chocolate chip size
 - Titrate use: every other night for two weeks
- Dryness
 - Moisturize with noncomedogenic
- Always use at night/Tretinoin
 - Adapalene/trifarotene/some tazarotene combos photostable

Benzyl Peroxide



- Comedolytic
- Anti-inflammatory
- Bactericidal actions
- Use with antibiotics to reduce antibiotic resistance
- **SE: dryness, burning peeling, BLEACHES CLOTHING**

Benzyl Peroxide



- Wash, Cream, Foams
- 5%, 10%
- Panoxyl, Clean and Clear System, Proactiv
- Benzefoam

Antibiotics-C.acnes/ant inflammatory



- Doxycycline Hyclate
 - 50mg, 75mg, 100mg, 150mg, 200mg
 - Doryx, Targadox, Acticlate, Doryx MPC
 - Oracea- 40 mg
- Minocycline
 - 45mg,55mg, 65mg, 80mg, 90mg, 100mg, 105mg
 - Solodyn, Ximino
- Sarecycline
 - 60mg, 100mg, 150mg
 - 9 years and older
 - Seysara
- Sulfamethoxazole/Trimethoprim : **DO NOT USE IF HAVE SULFA ALLERGY**
 - Bactrim

Antibiotics



- Indicated in the treatment of moderate to severe inflammatory acne or acne that does not respond to topical therapy alone
- Avoid in < 9 years or older: teeth discoloration with tetracyclines
- Antibiotic Stewardship
 - Use only in combination with benzoyl peroxide and retinoids
 - Do not use longer than 12 weeks – think of oral antibiotic treatment as temporary

Antibiotic Side Effects



- Nausea
- Vomiting
- Blurry Vision
- Blue Discoloration : minocycline
- **SUN SENSITIVITY: Daily SPF**

Antibiotics/Topicals



- Clindamycin
 - Cleocin lotion
 - Clindagel
- Erythromycin
- Minocycline: Amzeeq

Combination Treatments



- BPO/antibiotics: BPO + clindamycin
 - Duac, Benzacilin, Acanya ,Onexton
- Retinoid/antibiotic: Tretinoin + clindamycin
 - Ziana, Veltin
- Retinoid/BPO:
 - Adapalene + BPO = Epiduo and Epiduo Forte
 - Tretinoin + BPO = Twyneo

Hormones / Adult Female Acne



- Birth Control Pills: Estrogen Based
 - Drospirenone/Ethinyl Estradiol: Yaz
 - Ethinyl Estradiol/ Norgestimate: Ortho tri cyclen
 - Ortho cyclen
 - Norethindrone Acetate/Ethinyl Estradiol: Lo Estrin
- Spironolactone
 - Oral: Aldactone 50-150mg daily
 - Topical: Clascoterone 1% (Winlevi)

Hormone SE



- BCP
 - Weight gain
 - Spotting
 - Headaches
 - DVT/Blood Clots
- Spironolactone
 - Breast tenderness
 - Spotting
 - Potassium sparring: no Coconut Water/Milk
 - No Pregnancy

Isotretinoin



- Isotretinoin
 - Isotretinoin
 - Myorisan
 - Amnesteem
 - Absorica
 - Claravis
 - Zenetane

Isotretinoin Dosing



- Dose 1mg/kg – 2mg/kg
- I pledge
- 5-6 months
- ONLY ACNE MEDICATION TO BE USED
- **WOMEN NO PREGNANCY: URINE PREGNANCY EVERY MONTH**
 - **Must fill RX in 7 days from visit**

Isotretinoin SE



- **Dryness: LIPS, EYES, NOSE**
- Joint Pain: NO NEW EXERCISE Program
- Pseudotumor Cerebri: HA, Nausea, blurry vision, Tinnitus
- Increased Triglycerides
- NO DEPRESSION
- NO IBD
- 30% Risk Birth Defects

DIET



- Low glycemic Index
 - Ezekiel bread
 - Brown rice
 - Lean protein
 - Almonds, berries
- Low dairy
 - No SKIM MILK
 - Almond milk
- Spearmint Tea: three times a day

Acne Pearls



- Must treat acne before PIH
- Wash with gentle cleanser
- SPF: 30 or higher
- 3 months for initial improvement
- 6 months for clear to almost clear skin

Why We Treat Acne



Why Do We Treat Acne



R



Rosacea



Types of Rosacea



1. Erythematotelangiectatic (ERT)
2. Papulopustular
3. Phymatous- more common in men
4. Ocular

❖ Exclusion Rosacea Fulminans

Rosacea



- More common in Fitzpatrick I-II
- More common in Females
- Multifactorial Causes
- Trigger Factors
 - ***SUN
 - Alcohol
 - Spicy Foods
 - Extreme Temperature Changes
 - Hot liquids:

Rosacea Manifestations



- Flushing
- Transient or persistent erythema
- Papules/pustules
- Telangiectasis
- **NO COMEDOMES**

Rosacea Symptoms



- Burning
- Stinging
- Edema
- dry sensation

Rosacea Treatments



- DAILY SPF 30 or higher
- Metronidazole (0.75%-1%) cream
- Azelaic Acid (10%- 15%) cream/gel
- Micronized Benzyl Peroxide
- Oxymetazoline Cream
- Brimonidine Gel
- Oral Doxycycline/Minocycline: Papular Rosacea and Ocular Rosacea
- Laser: Pulse Dye Laser (PDL) or Intense Pulse Laser (IPL)

Rosacea Treatment



Papule/Pustule

- Azealic Acid 15%
- Ivermectin 1%
- Metronidazole 1% and 0.75%
- Sodium Sulfacetamide
- Doxycycline
- Micronized BPO

Erythematotelangiectatic

- Brimonidine 0.33% gel
- Oxymetazoline 1%
- Pulse Dye Laser
- IPL

Ocular

- Omega 3 supplements
- Topical calcineurin inhibitors
- Oral Tetracycline
- IPL

Avoid Trigger factors



- Heat
- Extreme Cold
- UV radiation (wear SPF)
- Alcohol
- Spicy Foods
- Hot temperature liquids

P



Periorificial Dermatitis



Periorificial Dermatitis



- Affects children and adults
 - Mostly women 20-45y/o
- Firm Pink papules and pustules around mouth and NLF
 - Spares upper cutaneous lips
- Topical Corticosteroids Common Cause
 - Cosmetics
 - Fluorinated Toothpaste
 - UV radiation
 - Medications- inhaled corticosteroids

Periorificial Dermatitis TX



- STOP TOPICAL CORTICOSTEROIDS
- Topical metronidazole 1% daily or 0.75%
- Topical calcineurin inhibitor: Pimecrolimus or Tacrolimus
- Oral tetracycline 40-250mg daily for 1-2 months
 - Pg women: erythromycin 500mg daily



Seborrhea Dermatitis



Seborrhea Dermatitis



- Adults and Infants
 - Cradle cap
 - Chronic relapsing in adults; NO CURE
 - Common in Parkinson's, Downs, Dementia
- Pink yellow scaly plaques; usually symmetric- *Malassezia*
 - Scalp
 - NLF
 - Eyebrows
 - Ears
 - Beard
 - chest

Seborrhea Dermatitis TX



- Ketoconazole: Cream and Shampoo
- Selenium Sulfide or Zinc based Shampoo
- Mild Topical steroid
- Topical calcineurin
- Topical Roflumilast Foam

P



Pityriasis Alba



Pityriasis Alba



- Hypopigmented macules
- Children and adolescents
- Common in Skin of color pts
- Can be associated with Atopic Dermatitis
- Upper body areas (face most common)



Lupus



LUPUS



- Malar Rash “Butterfly”
 - **SPARES NLF**
- Photo distributed areas
- Spares Knuckles of hands
- Mucosal Ulcerations
- +ANA, +Anti-dsDNA, +Anti-Sm

Lupus Work Up



- H&E Biopsy
- DIF
- Blood work
 - CBC
 - ANA
 - UA
 - C3, C4
 - **Anti-dsDNA antibody**
 - **Anti-Sm**
 - Anti-Ro antibodies

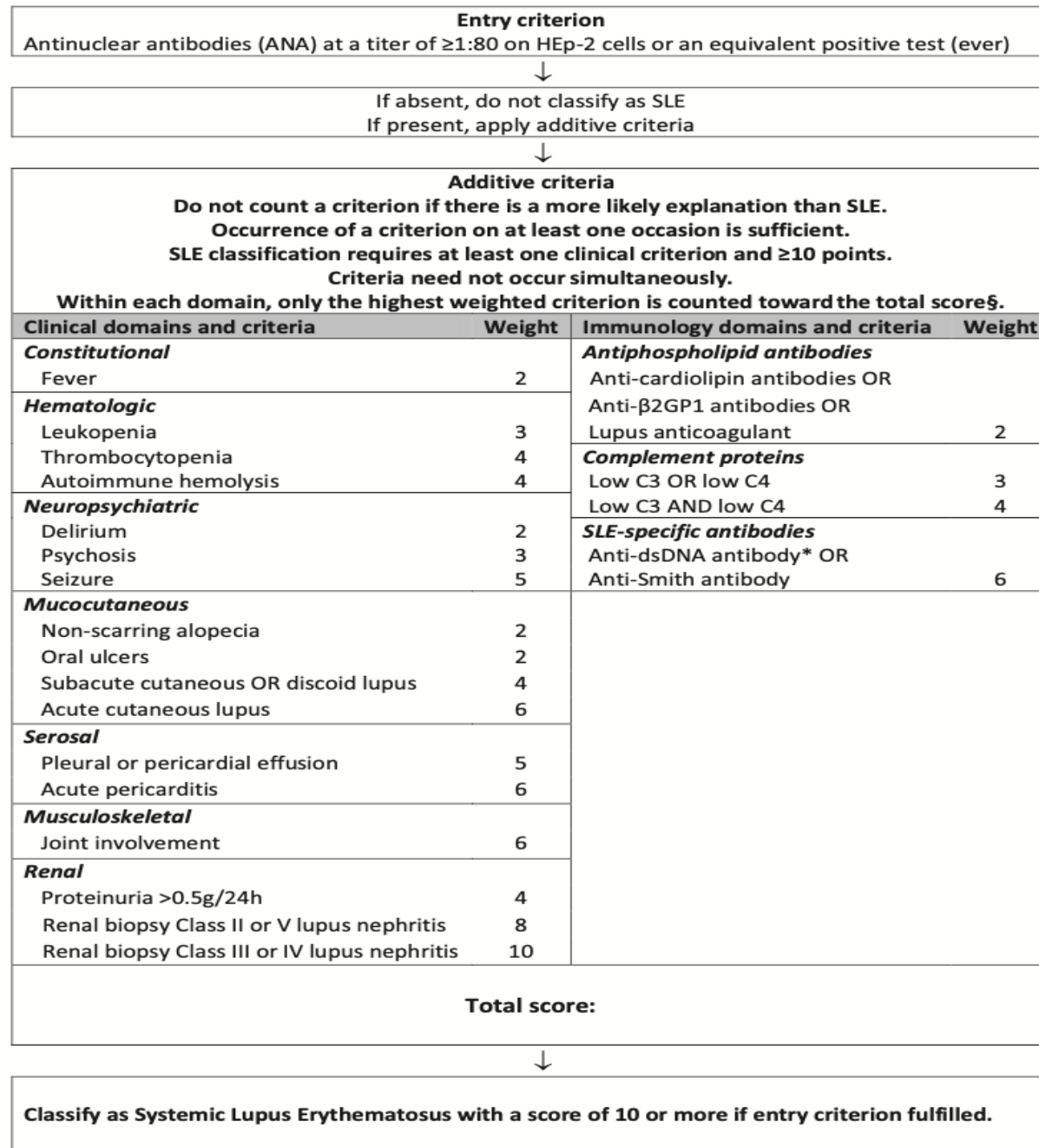
Lupus Treatment



- **SUN PROTECTION**

- Topical steroids
- Antimalarials
 - Hydroxychloroquine: not to exceed 5mg/kg/day real body weight
 - 200mg-400mg/day
 - Base line eye exam then annually- screen for retinopathy (highest >1000g)
 - 3 months for full effect
- MTX
- Mycophenolate
- Thalidomide

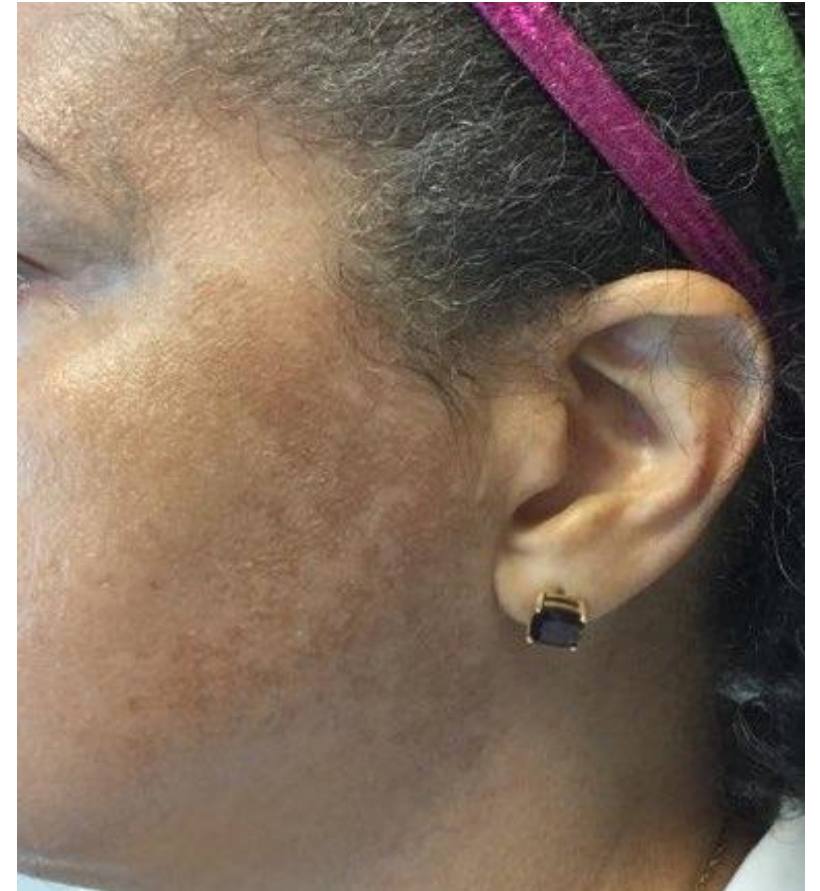
2019 EULAR Classification for SLE



M



Melasma



Melasma



- Brown and hyperpigmentation
 - Centrofacial 50%, Malar, Mandibular
- Mostly Women
- UV radiation/Heat exposure/Hormonal influence
 - PG mask

Melasma Treatments



- Hydroquinone
 - Klingmans: combo of 5% hydroquinone/tretinoin/dexamethasone
- Azelaic Acid
- Tretinoin
- Kojic Acid
- Tranexamic Acid: topical or oral
- Polypodium leucotomos: Heliocare

Melasma TX



- Inhibit Tyrosinase
 - Hydroquinone
 - Azealic Acid
 - Kojic Acid
 - Cysteamine
 - Glutathione- Can cause Liver/Kidney damage with systemic use
 - NOT APPROVED FOR COSMETIC USE

Hydroquinone



- Gold Standard
- 2-10% : NO LONGER AVAILABLE OTC in Europe, Japan, UK, Australia, and US
- Use for 2-3 months
- Can cause Ochronosis
- Not to use in pregnancy

Tranexmic Acid



- Blocks binding of plasminogen to keratinocytes- decreasing prostaglandins and endothelial growth factors
- Headaches, hypomenorrhea, abdominal pain
- Increased **THROMBOEMBOLIC RISK**
 - Pt should have no hx OR family hx of DVT
- 500-750mg daily for 3-4 months
 - May relapse after treatment

Other Melasma Treatments



- Chemical peels
 - Combo of glycolic and beta hydroxy acids
 - Series of 6-8
- Lasers
 - IPL or Q-switched Lasers
 - ****CAUTION high risk for relapse and condition becoming resistant to Tx

SUNSCREEN IS TX

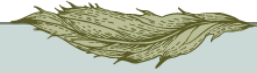


Sunscreen for Melasma



- TINTED
- Iron Oxide
- Blocks Visible Light (400-700nm)

Melasma



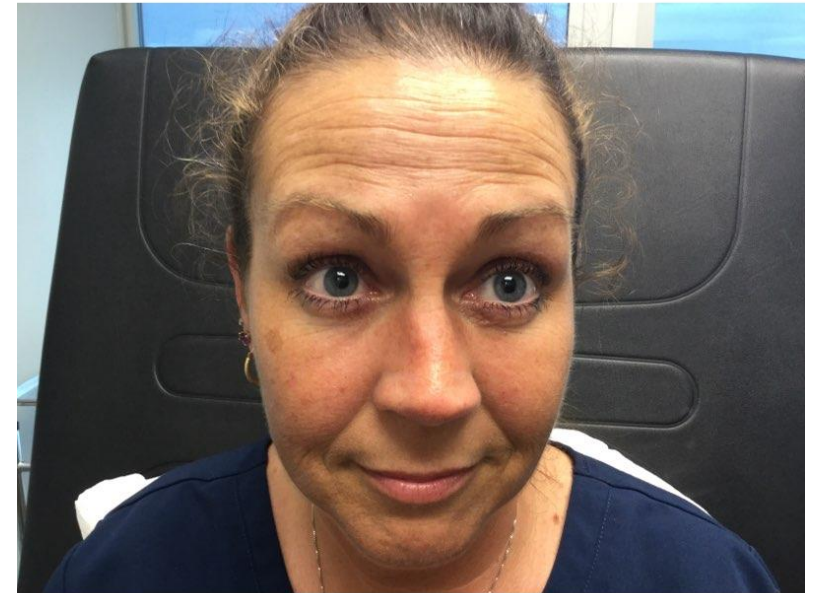
Melasma



W



Wrinkles



Neurotoxin



- Onabotulinumtoxin A (Botox)
- Abobotulinumtoxin A (Dysport)
- Incobotulinumtoxin A (Xeomin)

- Last 3-4 months
- #1 cosmetic procedure done

Neurotoxin



- *Clostridium Botulinum*
- Inhibits the release of acetylcholine from presynaptic motor neuron
 - Causes paralysis of muscle
 - Over time new terminals form creating new neuromuscular junctions
- Mixed with 1-5ml Saline
- Not in Pregnancy or Breast feeding

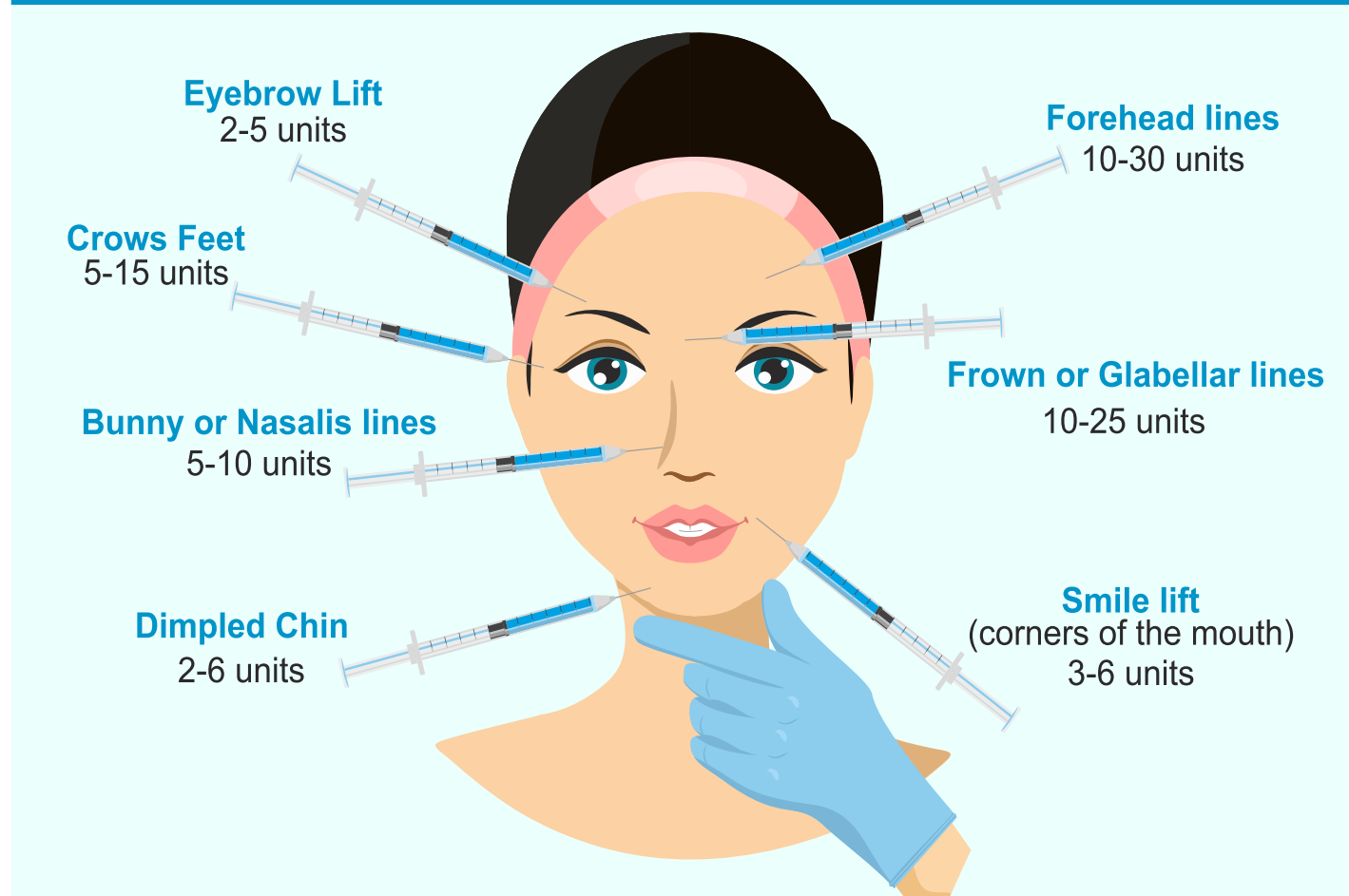
Neurotoxins



- FDA Approved
 - Forehead
 - Glabella
 - Crows Feet
- OFF LABEL
 - Upper lip
 - Bunnies
 - DOA's
 - Brow lift
 - Jelly Rolls

Dosing

How Much Botox Will i Need

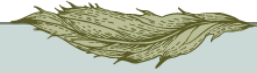


Neurotoxins

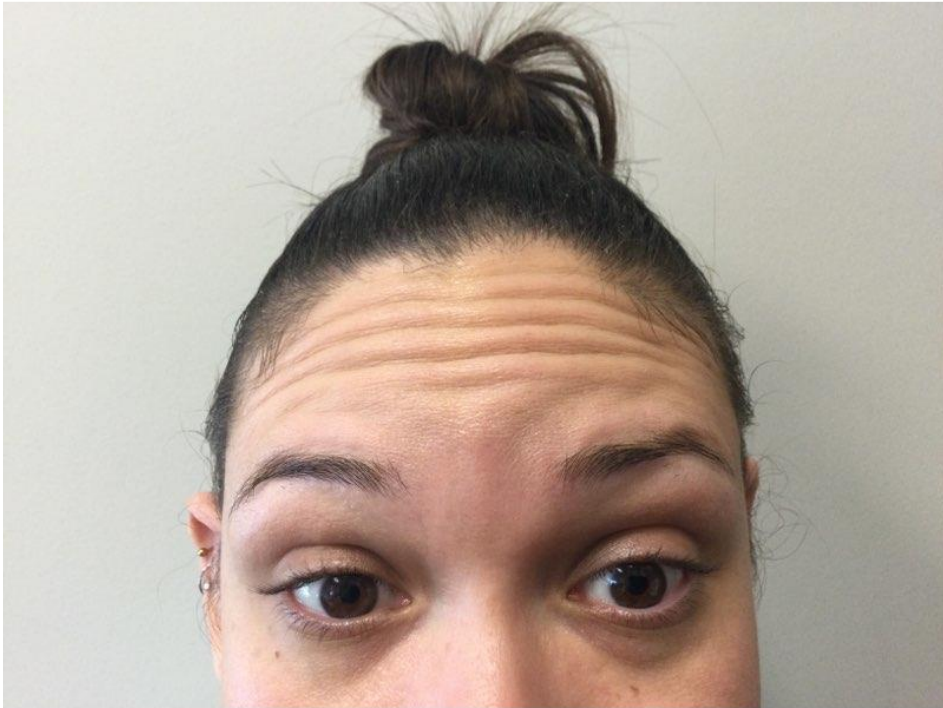


- Treat DYNAMIC WRINKLES ONLY
 - Lines made with muscle movement
- Takes 1-2 Weeks for Full effect
- Lasts only 3-4 Months
 - Best results seen with repetitive treatments every 3 months

Neurotoxin results



Neurotoxin results





BOTOX

smooths fine lines
prevents wrinkle

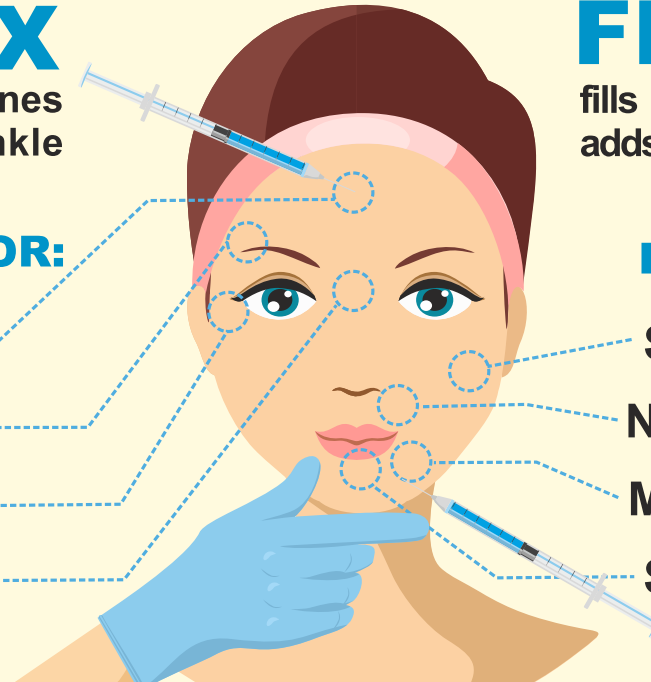
PERFECT FOR:

Frown lines

Brow lift

Crows feet

Glabella



FILLERS

fills creases & folds
adds volume & fullness

PERFECT FOR:

Sunken cheeks

Nasolabial folds

Marionette lines

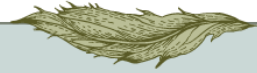
Sunken cheeks

Filler

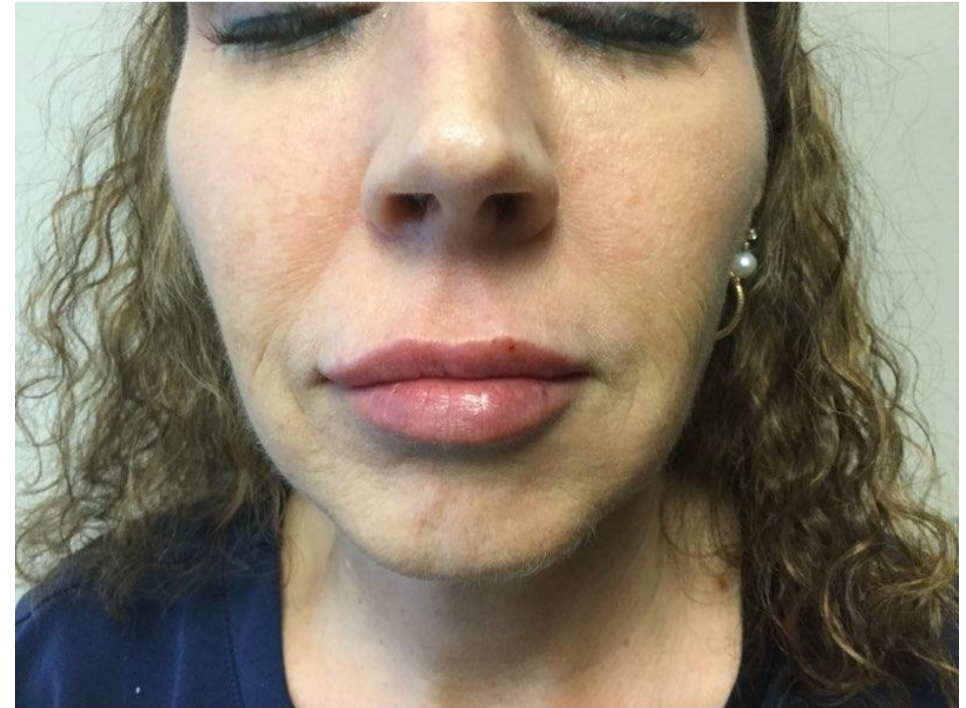
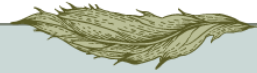


- Hyaluronic Acid
 - Juvederm products
 - Restylane products
 - Belotero
- Poly-L-lactic Acid : Sculptra
- Calcium Hydroxylapatite: Radiesse

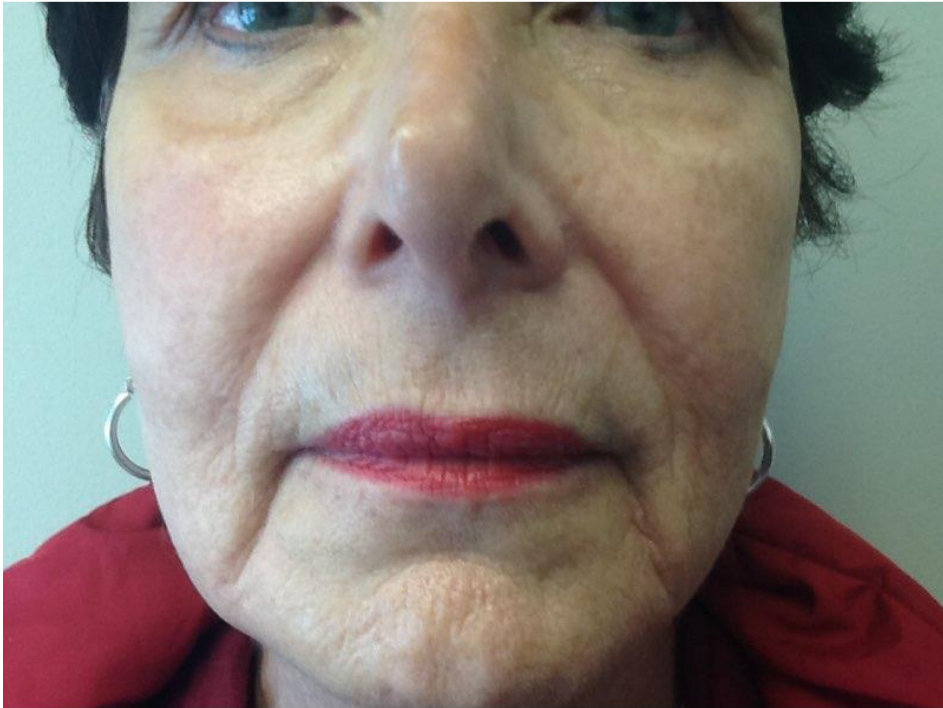
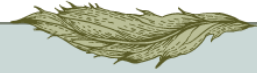
Filler Results



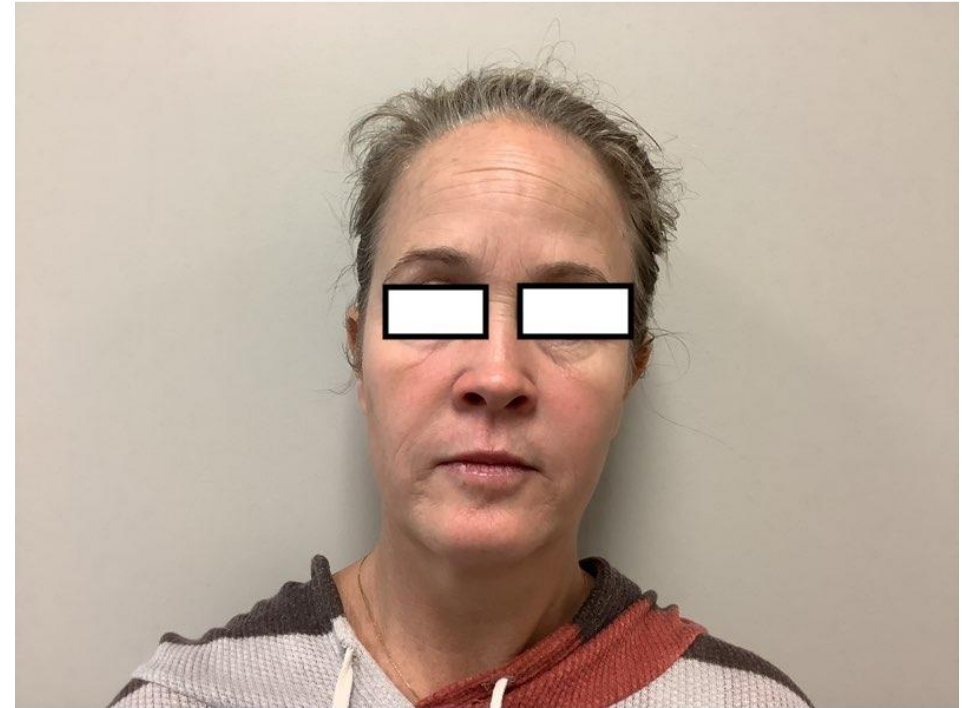
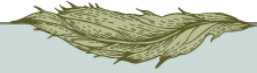
Filler Results



Filler Results



Botox and Filler Results





Thank You

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Skin Cancers/Sun Damage

- Actinic Keratosis - AK
- Basal Cell Carcinoma- BCC
- Squamous Cell Carcinoma- SCC
- MELANOMA

Actinic Keratosis



Occur on sun damage skin: Face, Scalp, Ears, Hands, & Arms

White/yellow Scaly Rough Patches

Potential to evolve into SCC: 0.1-20%



Actinic Keratosis Treatments

- Daily Sunscreen
- Topicals: 5% fluorouracil, Imiquimod, Diclofenac, tirbanibulin
- Cryosurgery: Liquid Nitrogen
- Photodynamic therapy: 5-Aminolaevulinic

Cryosurgery: Liquid Nitrogen

- Cure rate 57%-98.8%
- 5 seconds=39% 20 seconds=69% >20seconds=83%
- Blistering effect and potential dyschromia



J Am Acad Dermatol. 2021 Oct;85(4):e200

5% Fluorouracil Reaction



Imiquimod Reaction

11 days of Imiquimod



Post Topical Steroid



Basal Cell Carcinoma

- Most Common Skin Cancer : 4 million per year
- Slow Growing/Rarely Metastasizes
- Can destroy tissue if not treated
- Types: Nodular, Pigmented, Superficial, Morpheaform
 - Can be infiltrative

Basal Cell

- Nodular
 - Pearly papule with telangiectasias and central umbilication
- Superficial BCC
 - Erythematous scaly patch
- Morpheaform
 - Scar like
- Pigmented
 - Purple/black pearly papule

Basal Cell/Nodular



Basal Cell/Nodular



Superficial Basal Cell



Basal Cell/Morphea Form



Squamous Cell Carcinoma

- 2nd Most Common Skin Cancer: 1 million per year
- Caused by Exposure from UV radiation
- Can Arise from Actinic Keratosis
- Types: Invasive, Superficial (In situ), Keratoacanthoma
- Transplant patients at Higher Risk

Squamous Cell

- Scc Insitu
 - Scaly well demarcated plaque
- Invasive
 - Erythematous keratotic plaque or nodule
- Keratoacanthomas
 - Rapidly growing erythematous nodule with central keratotic core

SCC/Invasive



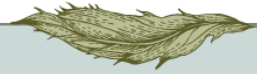
SCC



SCC InSitu



SCC/Keratoacanthoma



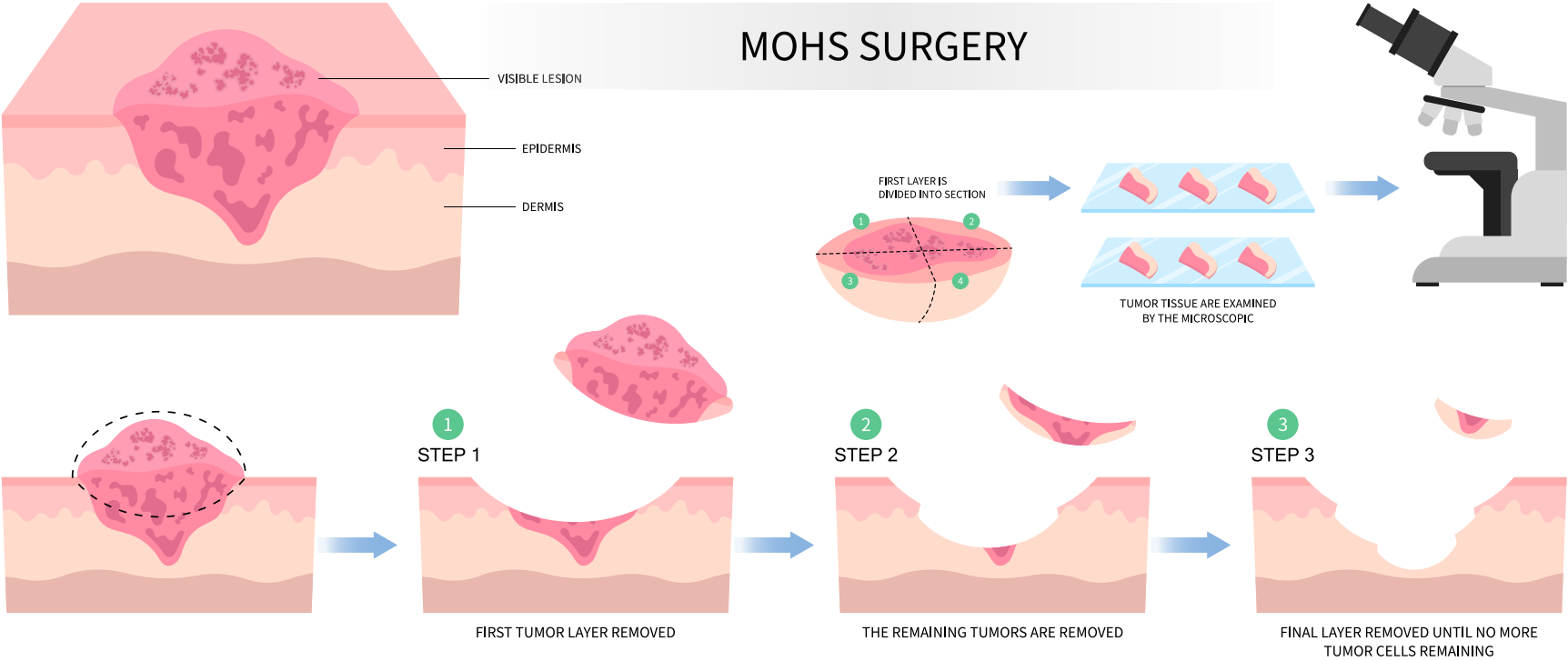
Treatments for BCC/SCC

- Electrodesiccation and Curettage (ED& C)
 - SCC- insitu or superficial BCC
- Excision
- Topicals : Imiquimod, 5-FU
- Radiation
- Mohs Surgery: Face, Scalp, Ear , Body (>2cm)

MOHS surgery

- Frederic Mohs 1930s
 - Modified by Tromovitch and Stegman in 1970s
- Tissue sparing technique, frozen section control of 100% surgical margin
 - Horizontal sections combined with precise mapping= cure rate 90-95%
- Indications
 - High risk location: H-zone
 - Tumors in previously radiated skin
 - Large tumors > 2 cm on body

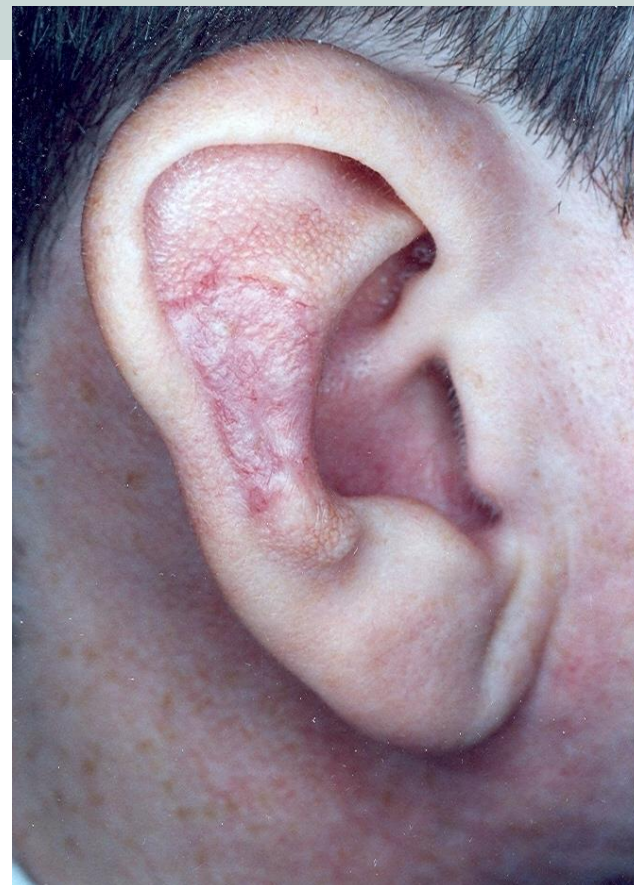
MOHS SURGERY



MOHS Surgery



Mohs



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