

BOTULINUM TOXIN A AND SKIN WELLNESS

Dr. Kingsley Chan 陳厚毅醫生

Specialist in Dermatology

MBBS(HK), MRCP (UK), FHKCP, FHKAM (Med), Dip Derm (Glasg), FRCP (Glasg), FRCP (Edin)

Clinical Assistant Professor (Honorary), Department of Medicine and Therapeutics, The Chinese University of Hong Kong;

Honorary Consultant Dermatologist, Kowloon Central Cluster, Hospital Authority

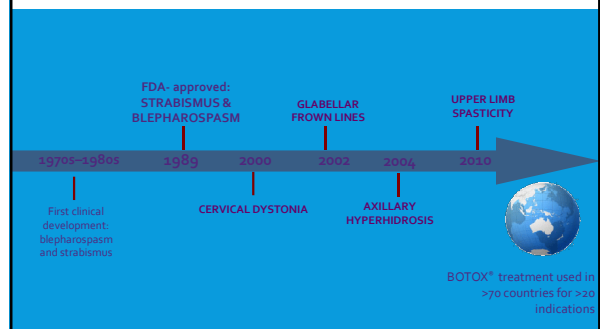
SKIN AGING



BOTULINUM TOXIN

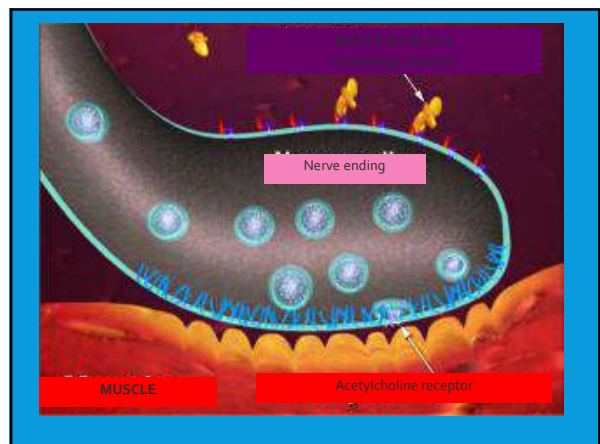
- Botox (Allergan)
- Xeomin (Germany by Merz)
- Dysport (United Kingdom)
- Lantox (Lanzhou Institute of Biological Products)
- Neuronox (South Korea by Medy-Tox)

DEVELOPMENT OF BOTULINUM TOXIN TREATMENT



BOTULINUM TOXIN

- Produced by the bacterium *clostridium botulinum* and is one of the most potent neurotoxins known.
- Act on cholinergic neuromuscular junctions to block transmission of synaptic vesicles
- Takes away wrinkles that are caused by facial expressions - those that appear when you smile or frown



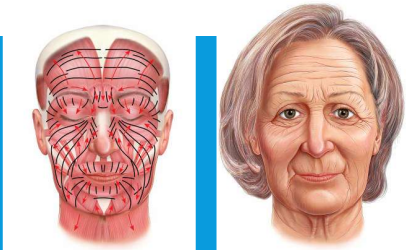
FDA-APPROVED INDICATIONS

- Forehead lines
- Glabellar lines
- Lateral cathal lines (crow's feet)

INJECTION POINTS AND DOSAGES VARY FROM PATIENT TO PATIENT

1. Functional anatomy
2. Muscle mass
3. Desired clinical outcome

MUSCLE ACTION AND WRINKLE FORMATION



- Repeated action of the muscle contributes to formation of wrinkles and folds
- Wrinkles always appear perpendicular to the action of the muscle

Carruthers JD et al. *Plast Reconstr Surg* 2008;121 (5 Suppl):5S-30S.

HORIZONTAL FOREHEAD LINES

FRONTALIS

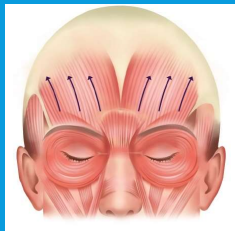
Galea aponeurotica

elevates the eyebrows

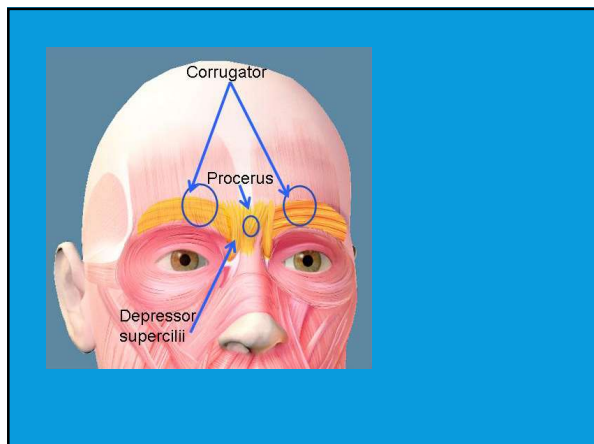
INSERTION

(sole elevator of brows)

Skin of eyebrows



GLABELLAR LINES



LID PTOSIS

- Weakness of levator palpebrae superioris
- Should be a consented risk
- Usually unilateral, mild and temporary (usually resolves in 2–12 weeks)

Lid ptosis

Joseph Niamtu III, Oral Maxillofacial Surg, Glou. Am. J. Otolaryngol. 2012

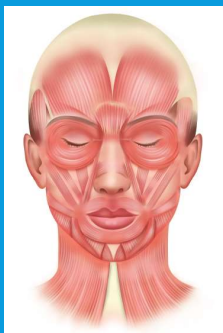
CROW'S FEET

CROW'S FEET: Patient assessment

- There are many different crow's feet patterns
- Ask the patient to smile deeply and to squint
 - Check for any asymmetry

CROW'S FEET: What to avoid

- Do not inject below the zygomatic arch
- Potential to cause cheek and lip ptosis



Carruthers JD et al. *Plast Reconstr Surg* 2004;114 (6 Suppl):1S-22S

CONTRAINDICATIONS

- Presence of infection at the proposed injection site
- Known hypersensitivity to any ingredient in the formulation


PRECAUTIONS

- Peripheral motor neuropathic diseases or neuromuscular junctional disorders
- Disorders of muscle weakness:
 - multiple sclerosis, amyotrophic lateral sclerosis
- Use during pregnancy – *Pregnancy category C (should be avoided)*
- Use during lactation is not advised
- Unrealistic expectations

POTENTIAL SIDE EFFECTS

- localized pain, inflammation, paresthesia, hypoaesthesia, tenderness, swelling/edema, erythema, localized infection, bleeding and/or bruising associated with the injection
- headache
- ptosis of lid or brow
- nausea
- flu-like symptoms/cold
- local muscle weakness
- ecchymosis

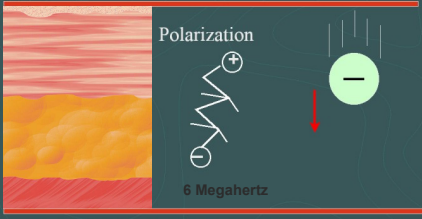
SKIN WELLNESS



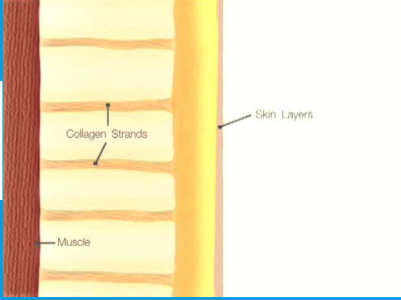
RADIOFREQUENCY TREATMENT

- Non-invasive - no surgery, no injections
- Single treatment, no down time
- Skin tightening and renewing the contour

RF – How does it work



Radiofrequency can penetrate deep into the skin to the collagen layer (unlike lasers which can only penetrate the surface layers). RF generates heat and stimulates collagen growth and remodelling.





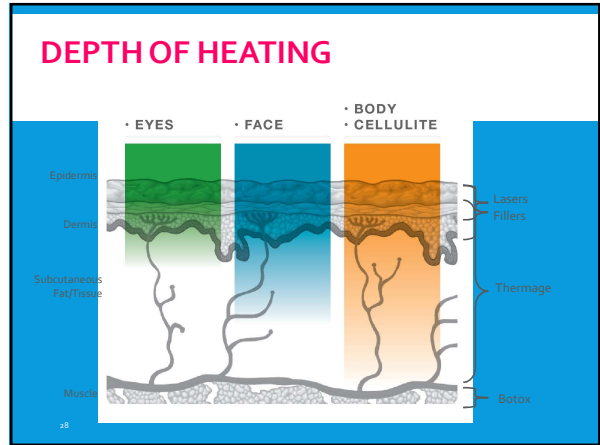
THERMAGE®

- Safe, non-invasive procedure
- Monopolar radiofrequency
- Possible side effects:
 - Redness
 - Edema
 - Physical discomfort



FDA Indications For Use:

- Non-invasive treatment of wrinkles and rhytids, including the upper and lower eyelids
- Temporary improvement in the appearance of cellulite



皮膚科專科陳厚毅醫生
DR. KINGSLEY CHAN

