Does Filler Choice for Tear Troughs Matter?

Karol A Gutowski, MD, FACS

Private Practice
University of Chicago
University of Illinois - Chicago

26th State-of-the-Art in Facial Aesthetics

Jung Hotel, New Orleans, LA
March 28-31, 2019
Merz – Advisory Board & Training Site
Syneron/Candela – Training Site

Merz makes products that I will mention

Will use product brand names due to lack of distinguishing generic names
Twin Comparison: Body Mass Index

Age 58

Perceived 5 years older
BMI 15 points lower

Guyuron, 2009
Facial Bone Changes

Bones in the midface and jaw become less prominent causing loss of structural support which leads to a sunken appearance.
Facial Bone Changes

Bones around the eye become larger causing loss of structural support which leads to aged appearance
Injectable Tissue Filler Options

- **Hyaluronic Acids**
  - Juvederm, Voluma, Volbella, Restylane, Belotero, Versa, etc.
  - *Reversible*

- **Animal Collagen**
  - Zyderm, Zyplasty, Evolence

- **Human Collagen**
  - CosmoDerm, CosmoPlast, Fascian, Autologen, Cymetra, LaViv

- **Stimulators**
  - PLLA (Sculptra)
  - PMM (Bellafill)

- **CaHA (Radiesse)**

- **Fat**

- **Silicone**
Elastic Modulus G’

*Mathematical description of product’s tendency to be deformed elastically
May not match clinical results
Restylane Product Particle Size

Silk
- Small Particle HA
- Range of 50–220 μm*

Restylane
- Small Gel Particle HA
- Range of 330–430 μm*

Lyft
- Large Gel Particle HA
- Range of 750–1000 μm*

All 3 have 20 mg HA per mL
Particle size is different
Water Absorption

Prevelle Silk

Restylane and Lyft

Juvéderm Ultra Plus

Less Swelling

More Swelling
Personal Experience

TEAR TROUGH INJECTIONS ARE COMING
• More and more common every year
• Typical repeat injection is > 12 months
• < 10% of cases need > 1 mL of product
• 184 cases
  – JUV, JUP, RST, LFT, BTO, BLF, RAD, VOL, VER
  – Hyaluronidase
    • 1 patient with complete reversal
    • 3 patients with minor reversals (lumps)
• I am very conservative
  – Aim for 80 to 90% correction, then touch up in 2 weeks
Injection Technique

• Patient warnings
• Topical anesthetic 20 min   
  – Does cause some swelling
• Throw away the package needle
• 1” 30G needle or 27G cannula   
  – Problems with Allergan syringes
• Loupe magnification
• Medial to lateral
• Up & down gaze
• 0.5 mL per side to start
Ideal Injection Case
Ideal Injection Case
Injection Technique ½” 30G Needle

Topical anesthetic
30G needle
80% correction
Injection Technique 1” 30G Needle

Topical anesthetic
30G needle
80% correction
Injection Technique 27G Cannula

Harder to place on periosteum

Blunt tip, Flexible Atraumatic
Mild Fat Pad Herniation
Mild Fat Pad Herniation

Topical anesthetic
Juvederm (Low G’)
30G needle
80% correction
Tear Trough Correction
Tear Trough Correction
Tear Trough Correction
Tear Trough Correction
Tear Trough & Malar Support
Tear Trough & Malar Support
Tear Trough & Malar Support
Tear Trough & Malar Support

Restylane
Facial Volumization
Start Superior & Lateral

0.8 cc syringe
40 to 50 passes
27G blunt cannula

Supraperiosteal Microdroplets
Volumize Inferior Orbit & Malar Area

0.8 cc syringe
40 to 50 passes
27G blunt cannula

Supraperiosteal

Subdermal
Fanning
Treat Hollow Cheek

0.8 cc syringe
40 to 50 passes
27G blunt cannula

Supraperiosteal

Subdermal

Subdermal Cross Hatching
Move to Lower Face
0.8 cc syringe
40 to 50 passes
27G blunt cannula

Subdermal
Fanning &
Cross Hatching
Facial Volumization: Bellafill 4.6 cc
Bellafill + Upper Blepharoplasty + Lower Lid Fractional CO2 Laser
Persistent HA

Restylane persisting in lower eyelids for 5 years

Steven H Dayan, MD, FACS, John P Arkins, BS, & Michael Somenek, MD

After 5 years, fullness resolved 2 weeks after 60U hyaluronidase injected per side
HA Migration

- 3 patients with tear trough injections resulting in inferior migration years later
- Resolved with hyaluronidase
Hyaluronidase works for
Juvederm
  Ultra & Ultra Plus
  Voluma & Volbella
Restylane
  Lyft & Silk
Belotero
  Versa

Always have Hylenex available for HA injections
Retrobulbar Injection Technique
Tear Trough & Lower Lids

- Inject on periosteum
- Expect edema & ecchymosis
- Under correct
  - Touch up in 2 weeks
- Prolonged edema
  - Treat early
  - Hyaluronidase
- May persist for years

Not for novice injectors
Tear Trough Summary

- Most HA fillers have good results
- Radiesse and Bellafill can be used
  - Very conservative
  - Experienced injector
- Sculptra – don’t recommend
- Needle vs Cannula?
- Technique matters more than filler
- Not all patients are candidates
Does Filler Choice for Tear Troughs Matter?

Karol A Gutowski, MD, FACS
Karol@DrGutowski.com
773-870-0732
Copy of this presentation

DrGutowski.com ➔ For Physicians

26th State-of-the-Art in Facial Aesthetics

Jung Hotel, New Orleans, LA
March 28-31, 2019