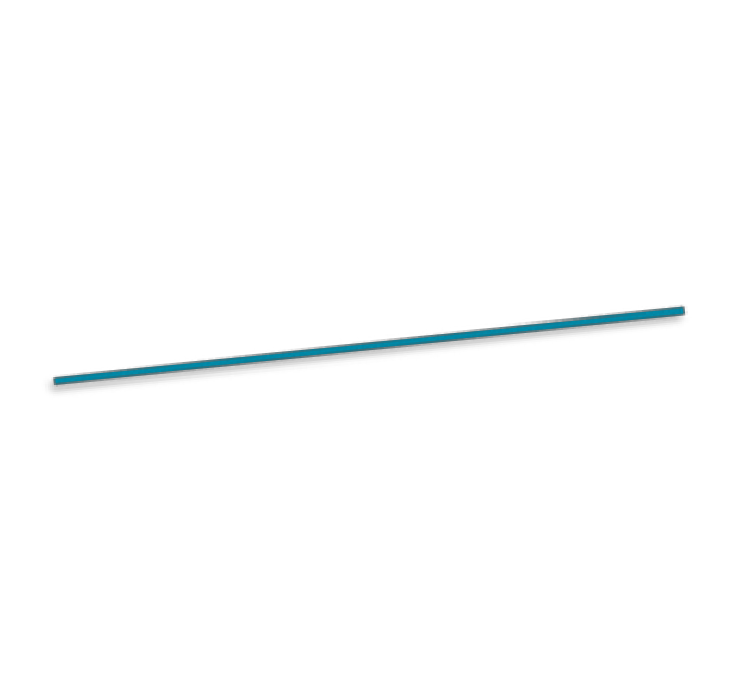
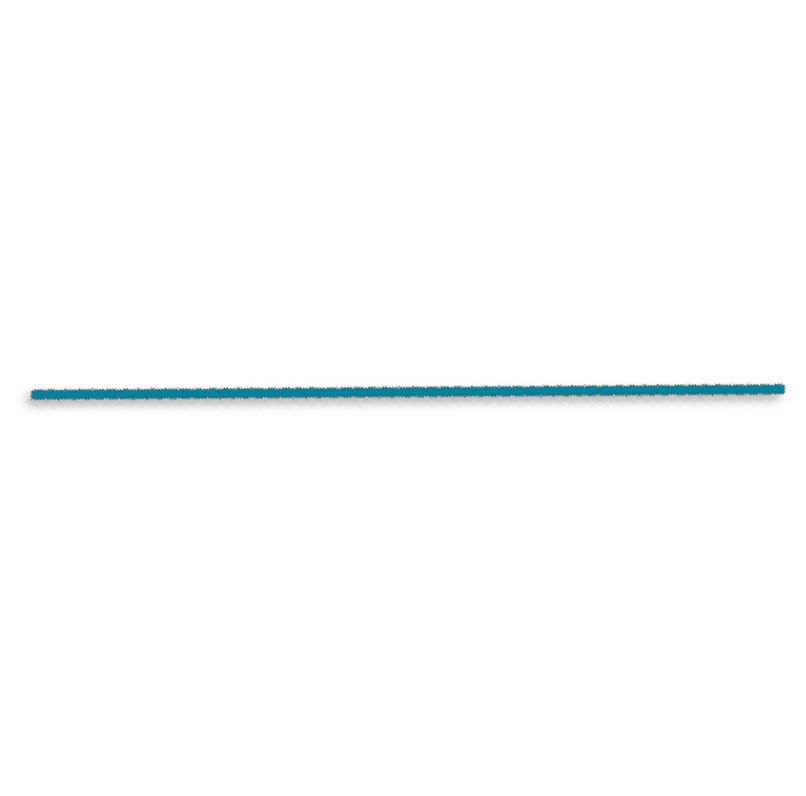
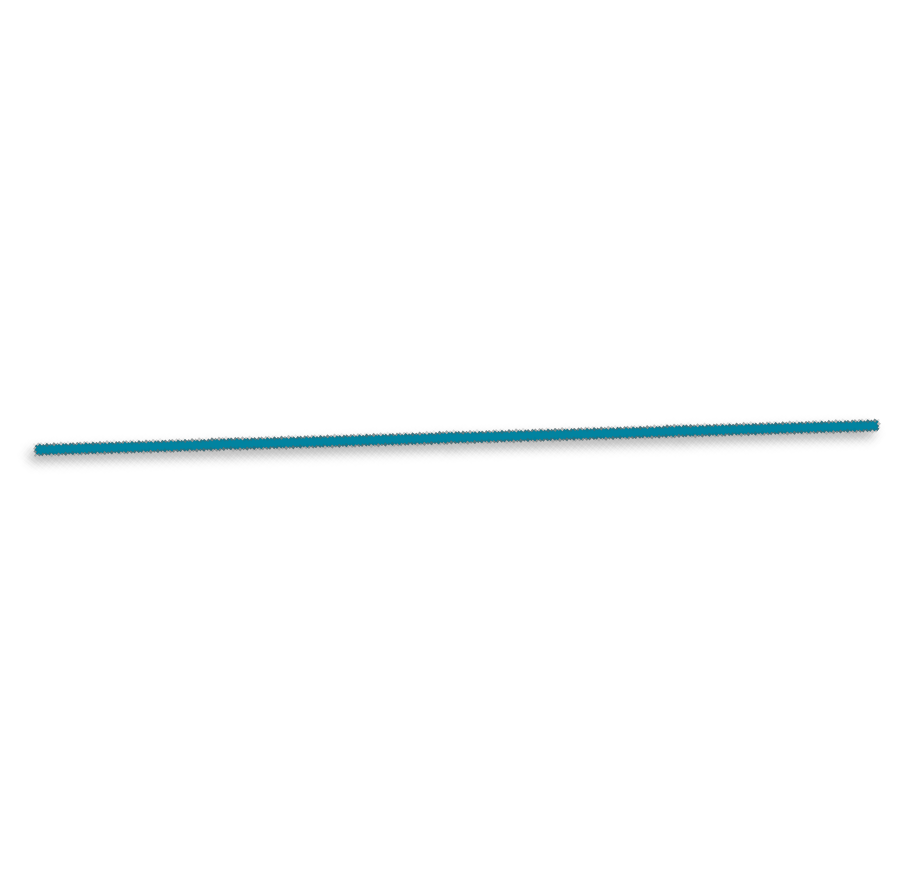
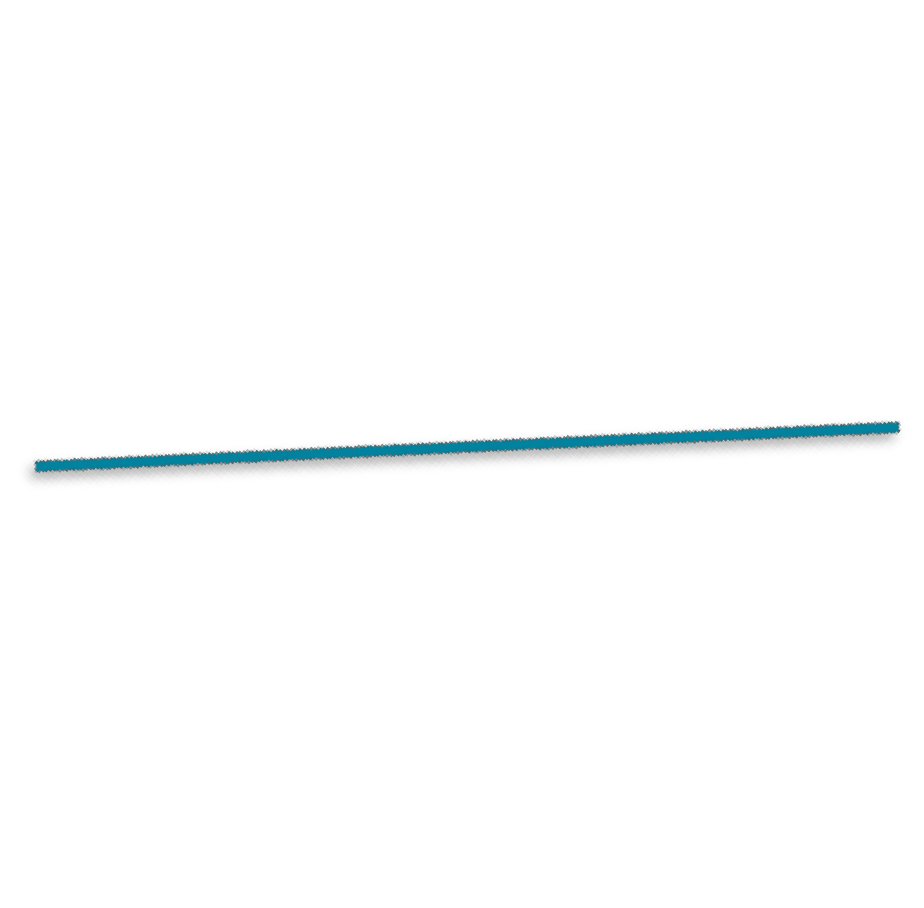
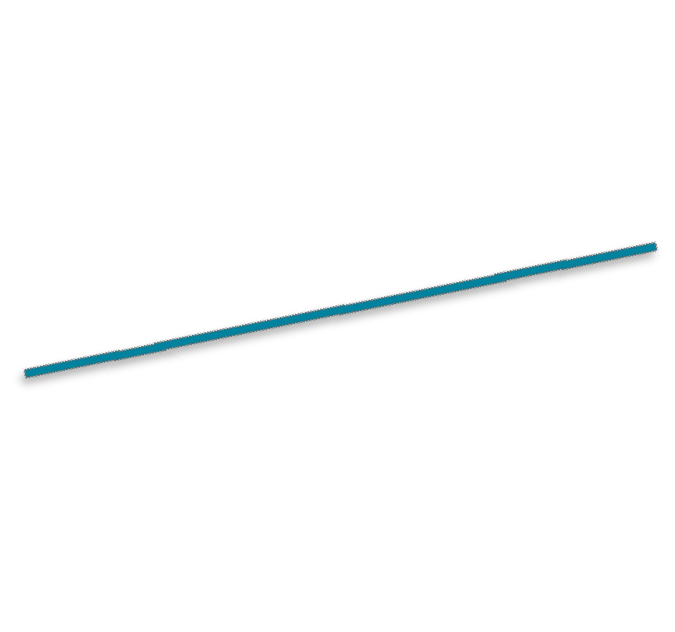
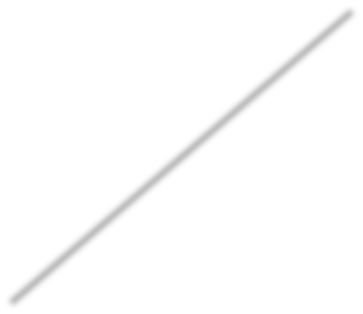
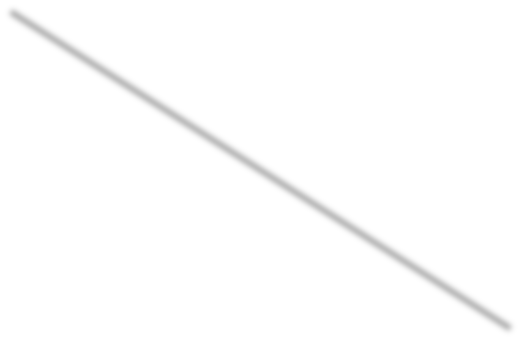
Facial Anatomy



## Indications and Facial assessment

Dysport 50 units



Restylane or Perlane



Beauty is characterized by:

* A youthful face
* Symmetry and harmony
* Clear skin
* Even skin tone and texture
* Attractive smooth lips

<http://www.phimatrix.com/face.htm> downloaded on 29/11/12



# Facial aging

## Causes of ageing

###### Intrinsic factors

* Genetics
* Gender
* Time
* Evolution
* Expressivity
* Atrophy of dermis and subcutaneous tissue

**Clinical signs**

* Wrinkles
* Laxity
* Atrophy



* Volume loss

###### Extrinsic factors

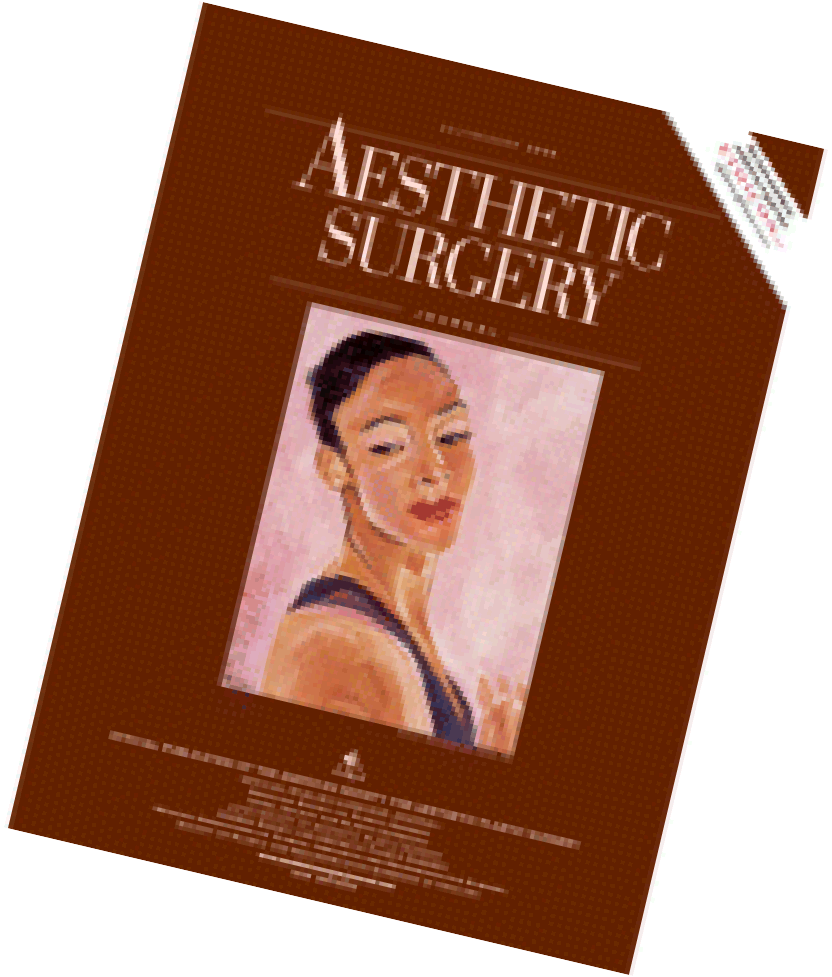
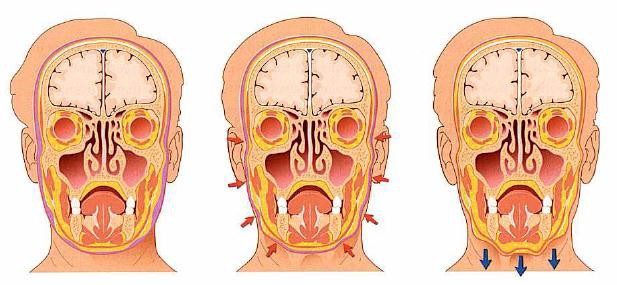
* Smoking
* Sun exposure

###### Affected structures

* Collagen
* Elastin fibres
* Fibroblasts and matrix



## Ageing Face = Volume loss

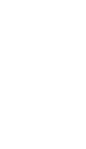
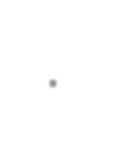


**Rajiv Grover & Sydney Coleman 2006 American Journal of Aesthetic Surgery**



# Facial fat compartments

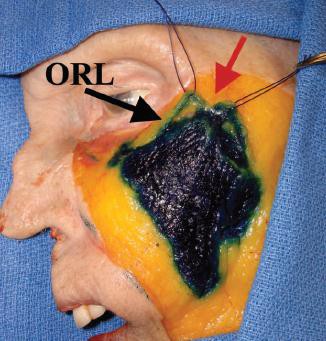
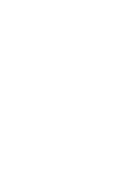




The knowledge of anatomy

provides a better understanding and greater precision for the analysis and development of facial ageing treatments.

ANATOMICAL CONSIDERATIONS



Cheek fat compartments

Three different cheek fat areas: temporal-medial,

middle and lateral-temporal

**a) Medial compartment:**

This area is outlined outside by the **ORL** ligament and the orbital area.

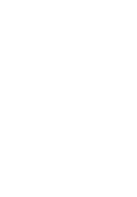
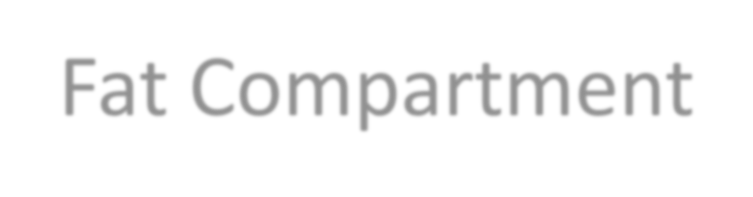
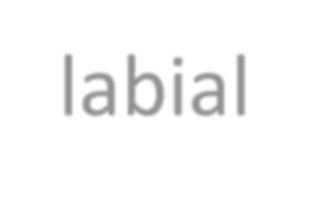
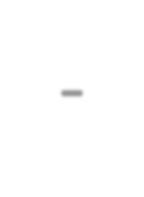
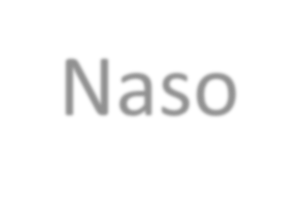
###### b) Middle portion of the compartment:

This fat compartment is anterior and superficial to the parotid gland.

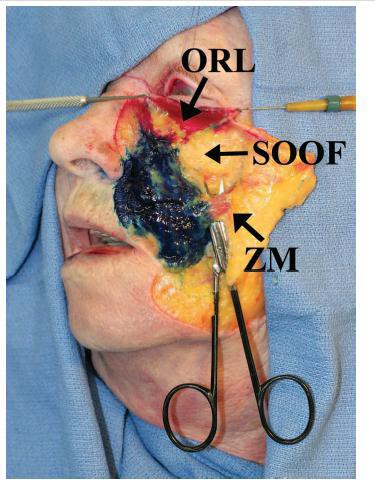
At the top it is attached to the zygomatic major

muscle.

The upper edge is defined by the top wall of the cheek **(SCS).**



Naso-labial Fat Compartment



The naso-labial fat area is the middle of the cheek

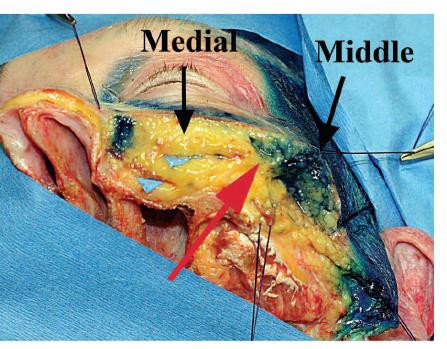
area

* The outer limit is the orbicular retaining ligament **(ORL).**
* The suborbicular **(SOOF**) is the lateral and deep

limit

* The inferior edge is the zygomaticus major muscle **(ZM)** , the muscle that is attached to this compartment.

(*Plast. Reconstr. Surg.* 119: 2219, 2007.)



Transversal anatomical section shows 3 confluent areas, and they form a dense

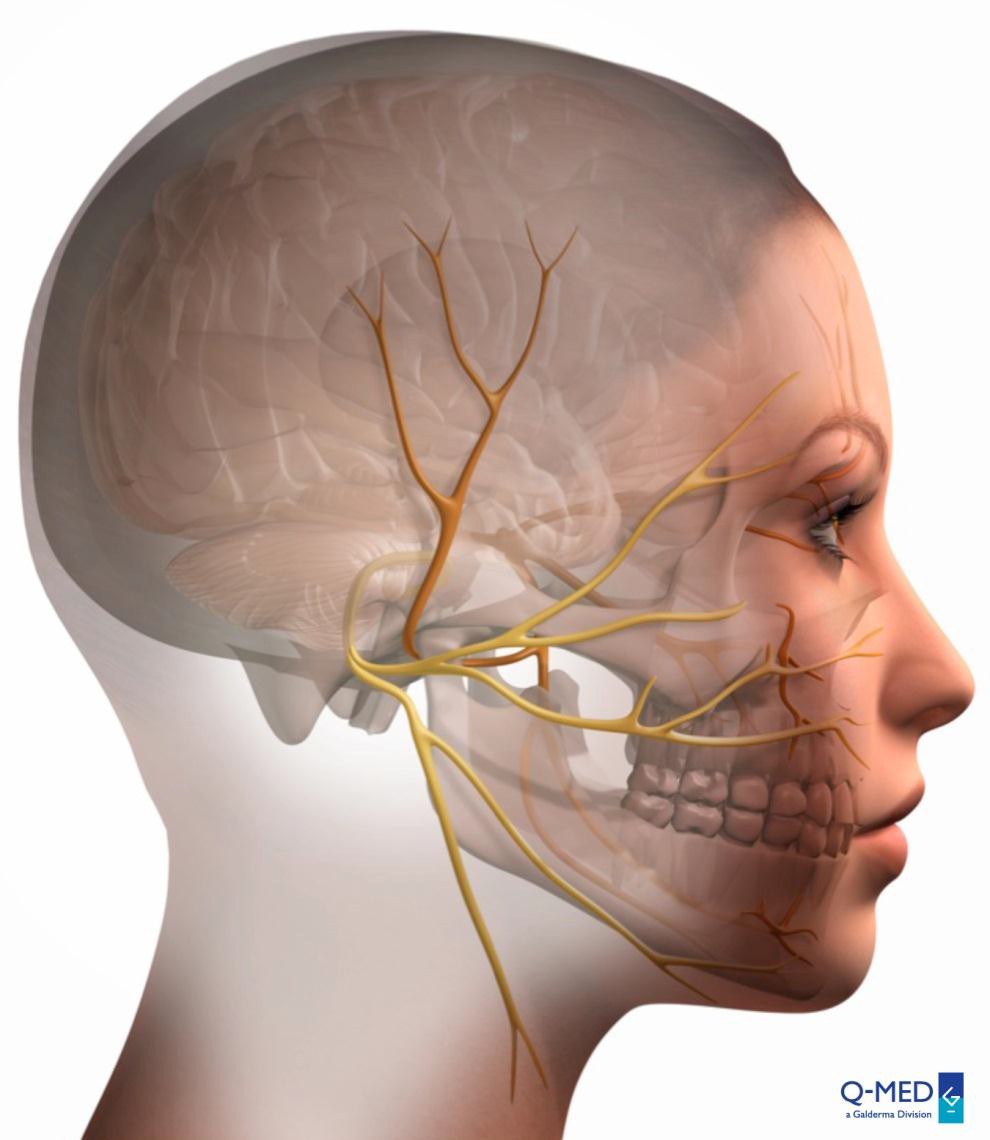
zone(red arrow)

The zygomaticus muscle is found at the deepest when it is at this crossover level

# Facial nerves

## Sensory innervation of the face

Trigeminal nerve



CN V

Supratrochlear Supraorbital

CN V1

Lacrimal Zygomaticotemporal

Zygomaticofacial

CN V2

Infra orbital Facial

Auriculotemporal Buccal

CN V3

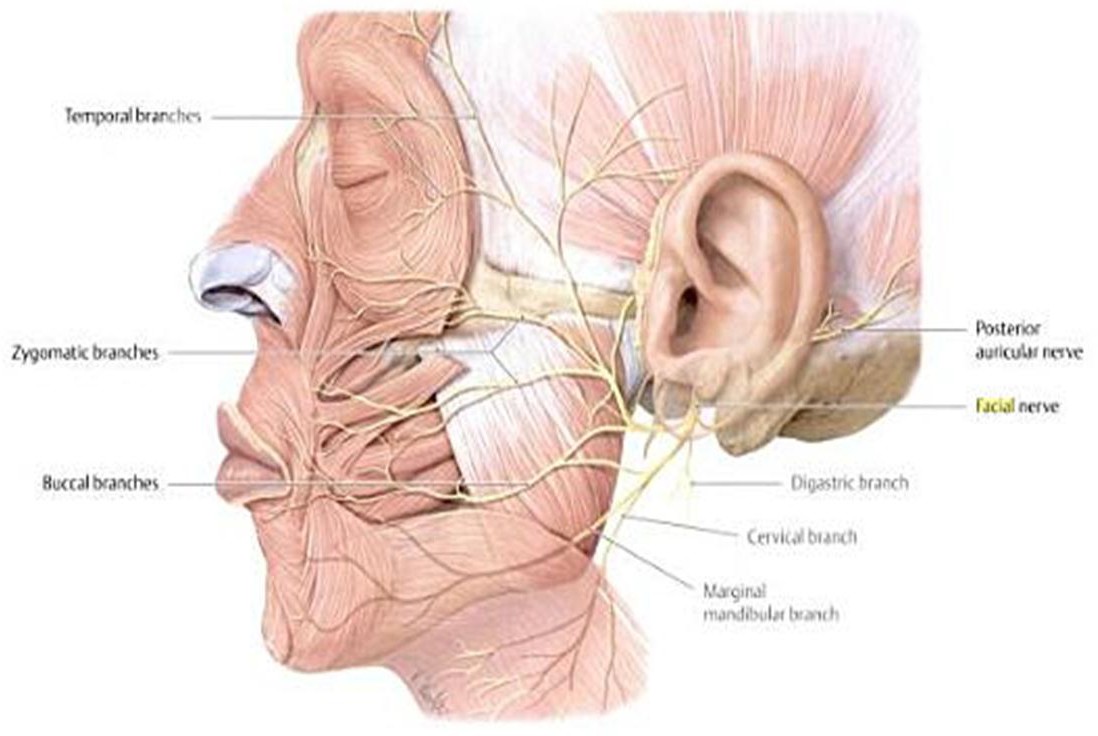
Mental

<http://www.davidson.edu/academic/psychology/ramirezsite/neuroscience/psy324/aa>



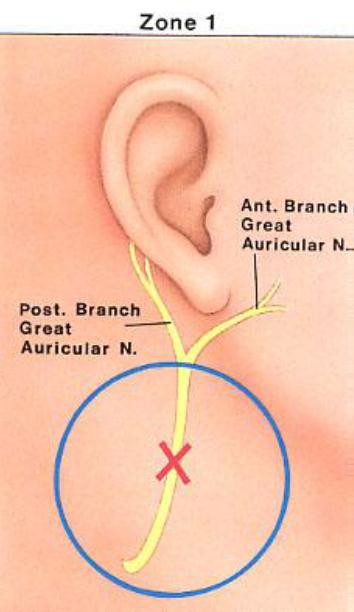
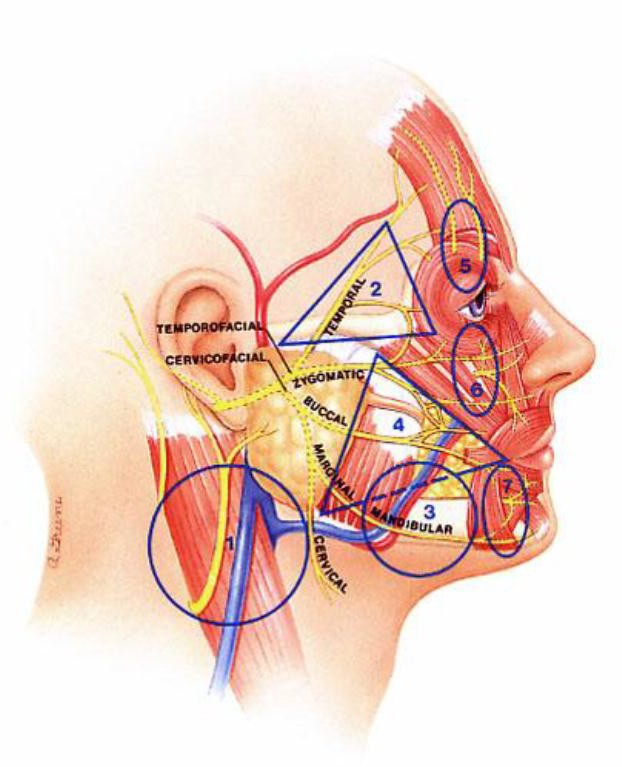
patton/anatom4.jpg

#### DANGER ZONES FACIAL NERVES



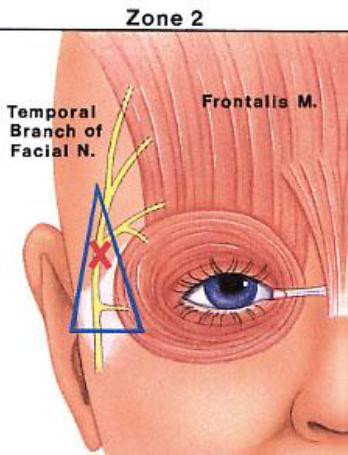
Micahel Schuencke et al, Thieme Atlas of Anatomy Head and Neuroanatomy New York USA 2010

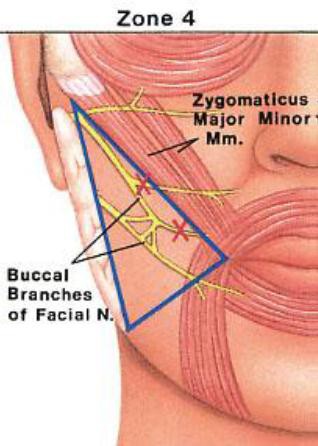
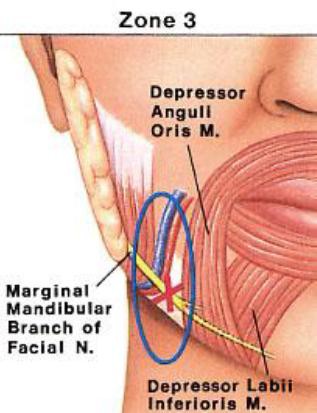
#### DANGER ZONES FACIAL NERVES



<http://avshalom-shalom.com/interns/face%20lift/facial%20anatomy.pdf>downloaded 26 March 2013 @11.40am

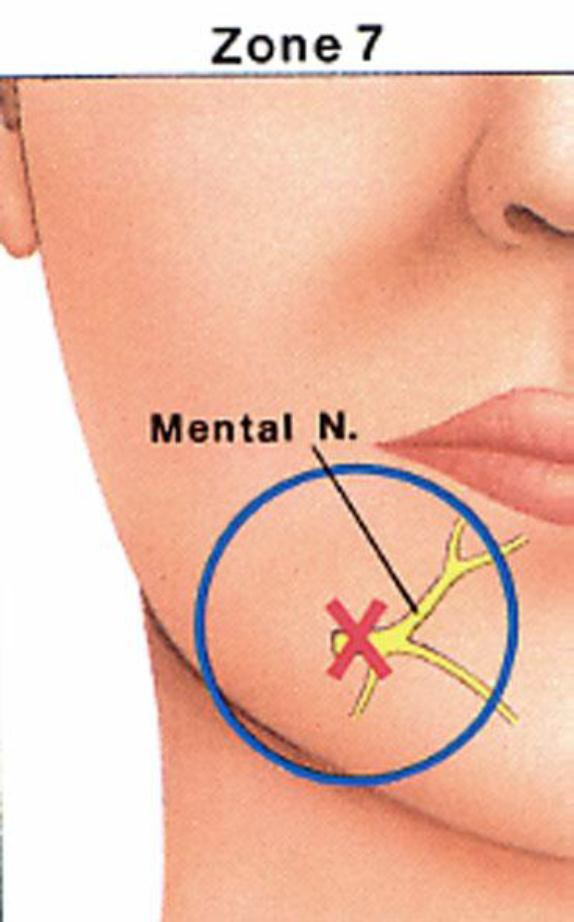
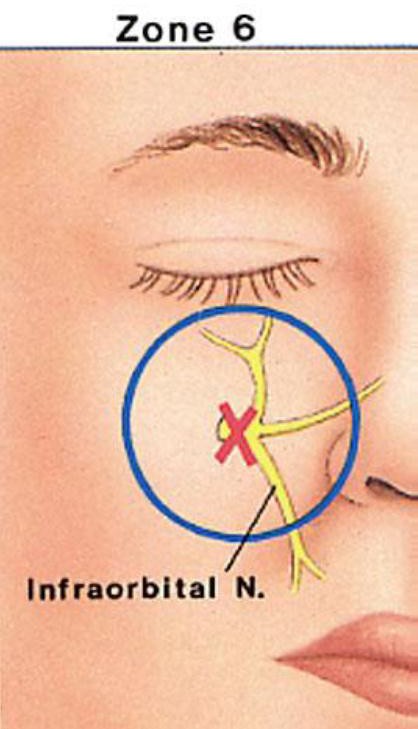
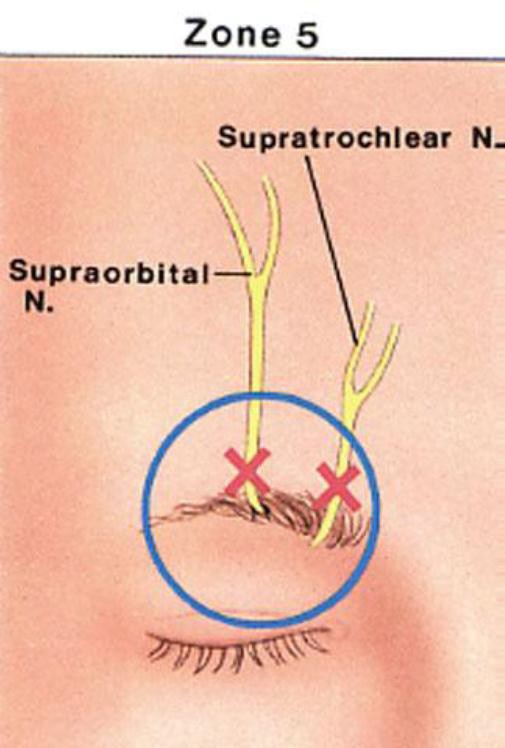
#### DANGER ZONES FACIAL NERVES





<http://avshalom-shalom.com/interns/face%20lift/facial%20anatomy.pdf>downloaded 26 March 2013 @11.40am

#### DANGER ZONES FACIAL NERVES

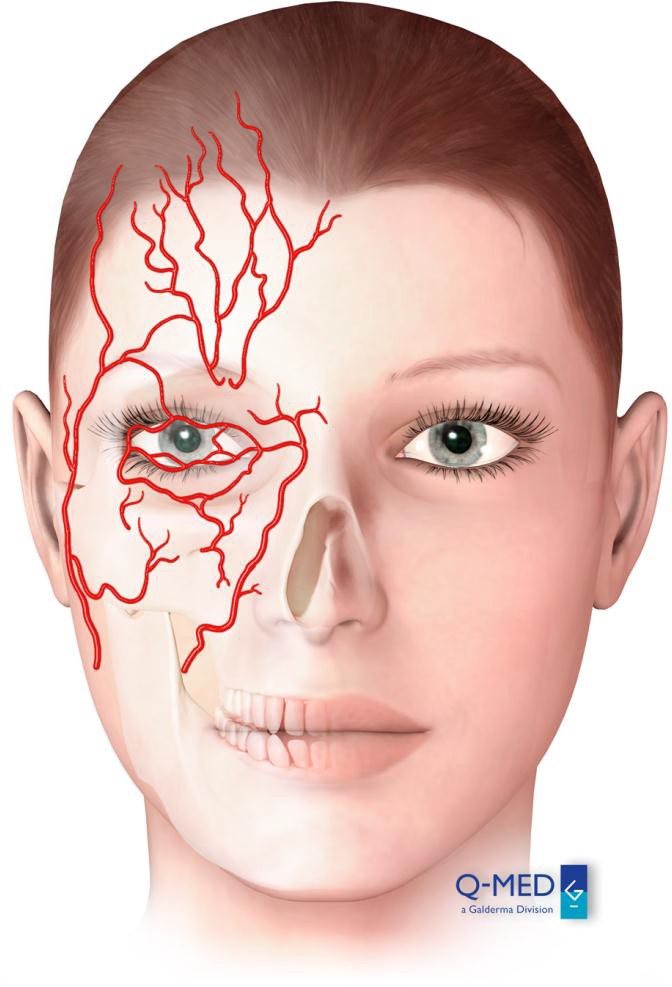


<http://avshalom-shalom.com/interns/face%20lift/facial%20anatomy.pdf>downloaded 26 March 2013 @11.40am

# Blood supply of the face

## Arterial blood supply of the face

Supraorbital



Supratrochlear

Temporal artery

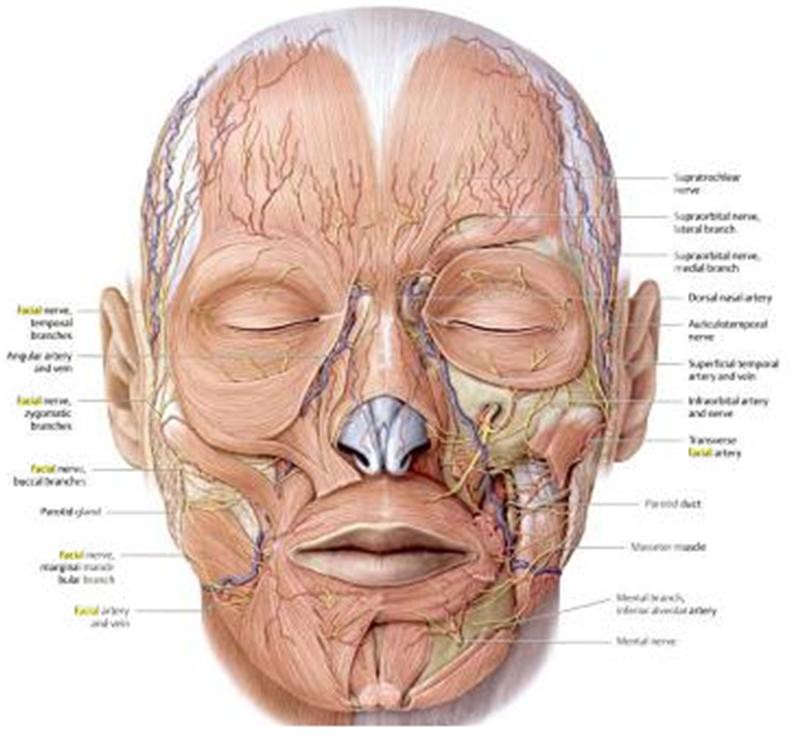
Lacrimal Lateral nasal

Angular Infraorbital Transverse facial

Facial



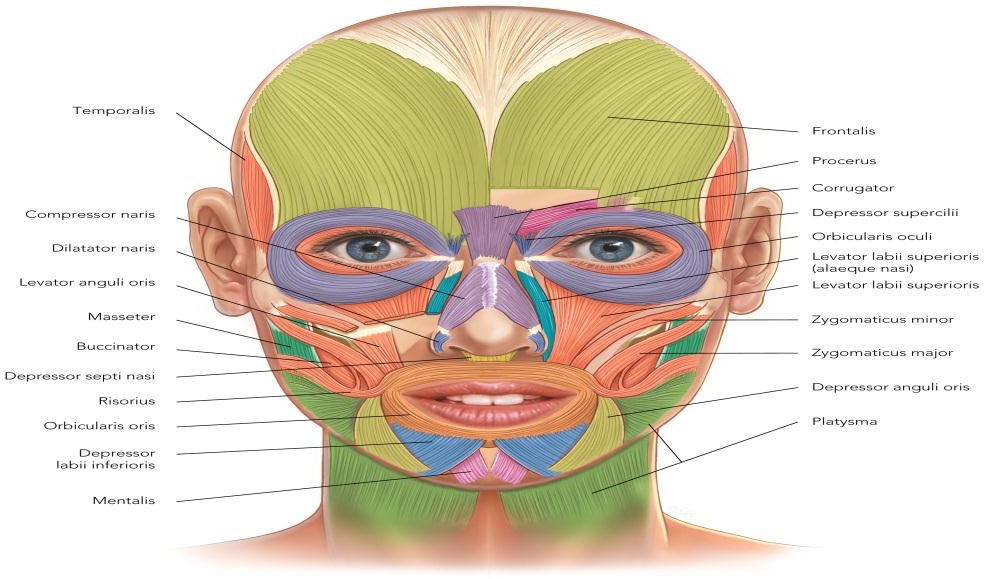
#### DANGER ZONES FACIAL ARTERIES



Micahel Schuencke et al, Thieme Atlas of Anatomy Head and Neuroanatomy New York USA 2010



## Muscles of the face





#### 3 COLUMNS OF COSMETIC DERMATOLOGY

|  |  |
| --- | --- |
| AREA OF CLINICAL AGEING | TREATMENT OPTIONS |
| Skin surface and texture | + Laser and light-based treatments  + Chemical peels  + Medical skin needling  + HA skin revitalisation  + (micro) – dermabrasion  + Tretinoin or cosmeceutical skincare regimens |
| Volume and  contour loss | + Volumetric restoration/augmentation with injectable soft-tissue volumisers/implants  + Facial contouring/sculpting  + Tissue stimulators |
| Lines and wrinkles | + Muscle relaxation with botulinum toxin  + Injectable dermal fillers/soft-tissue implants  + Tissue stimulators |

Dr Stefanie Williams, The 3D Approach to Cosmetic Dermatology DERMA 2010; 1(2). Sept 2010

## Treatment solution with Restylane range

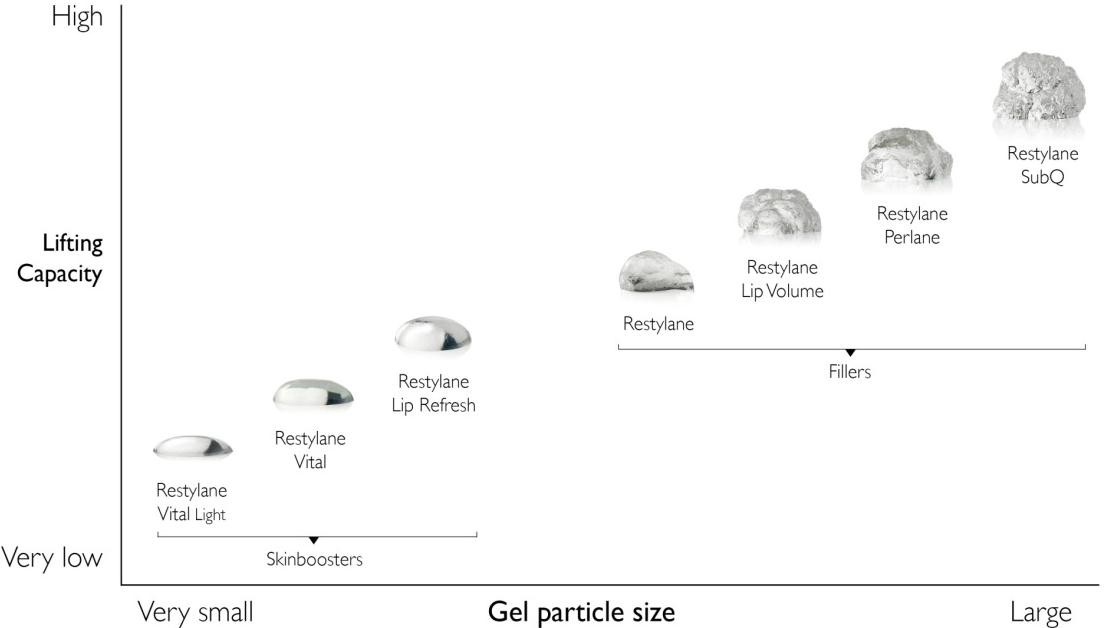
###### Versatile with a solution for different skin types and indications





THE RESTYLANE® RANGE

+ A solution for different skin types and indications



+ Products can be layered

+ Superior lifting capacity vs other HA products1,2\*

\*In rheological tests

1. Stocks D *et al. J Drugs Dermatol* 2011;10:974-80. 2. Edsman K *et al. Dermatol Surg* 2012;38:1170-79. 3. Restylane SubQ IFU. February 2011

## The Combination Treatment Concept

### NASHA™ fillers



#### restore facial volume

* + create a more youthful and enhanced facial appearance

Layering of SubQ and Perlane to smooth and lift



Restylane SubQ

###### Strongest product in the range – ultimate lifting capacity

* + **A niche product**
  + **1mL per cheek at single treatment session with a maximum dose of 2mLs**
  + **Place deeply**
  + **Perlane can be combined with SubQ to layer**
  + **Needle or cannula (I prefer Needle - precision, ease and speed)**
  + **Patient selection**
  + **Hygiene and Asepsis critical**



Q-Med Clinical Guide, SubQ PI



## Restylane Perlane

### Strongest product when tested against

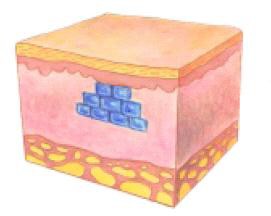
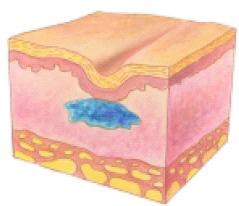
**competitor HAs**

* + **Strong lifting capacity – high G prime**
  + **Can be layered together with SubQ**
  + **Inject into subcutis**
  + **Needle or cannula (I prefer Needle -**

**precision, ease and speed)**



Superior lifting capacity



###### For smooth skin and restored volume



COMBINATION TREATMENT - STEPS

1.Assess 2.Educate 3.Plan

1. Treat by indication
2. Create ongoing treatment plan

Stocks, D 2010

## Key Success Factors – DOCTOR/INJECTOR

#### Skilled

* + Experienced
  + Trained with volumetrics
  + Good anatomical knowledge



Key Success Factors - PATIENT

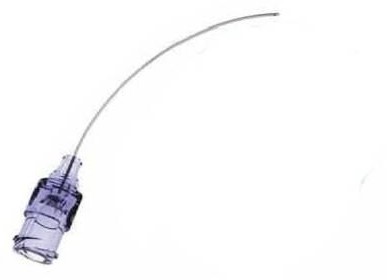
##### Healthy Patient

* + Good soft tissue covering
  + Mild to moderate volume loss
  + Reasonable skin elasticity
  + No infections – sinus, dental, skin or systemic
  + No other products insitu esp. permanent product
* Almost every patient can have versatile Perlane – strong and robust product (Stocks,D et al 2011)



## Key Success Factors - TREATMENT

#### Aseptic technique



* + Cannula vs Needle
  + Bolus vs Thread

SUBQ

* + Prophylactic Antibiotics
  + Volumes 1mL per Malar
  + Deep periosteal and deep Sub-Cuticular injection



#### NEEDLE OR CANNULA?

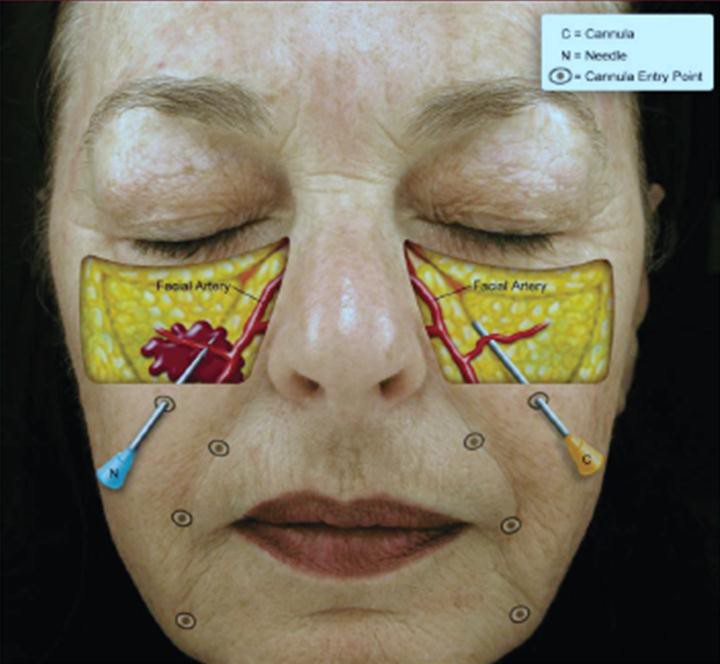
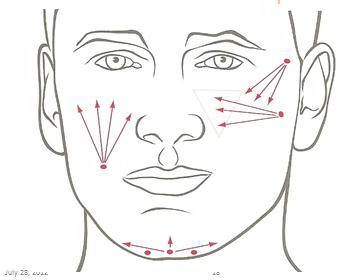


Image courtesy of Maria Kim and Joel L. Cohen MD

Zeichner J.A. and Cohen, J. L. 2012

# Transdermal Needle Technique



Q-Med Clinical Guide

## Managing Complications

* + Early intervention and medical

assessment

* + Appropriate investigations
  + If inflammation suspect infection and treat with appropriate antibiotics (prescribed by doctor)



Benefit of multiple syringe treatment to patient

* + Excellent value
  + Create the WOW effect minimizing

perception of age (Amy Forman Taub)

* + Look good feel good factor



Benefit of multi syringe treatments

* + Allow for individualization of treatment
  + Makes sense financially
  + **Multiple** syringes reduces perception of

age (Amy Forman Taub)

* + Positive results lead to referrals ( WOW

leads to WORD OF MOUTH)



## Best practice

* + Let patients know what you offer
  + Communicate and educate patients
  + Team approach - Involve all staff
  + Follow up
  + Positive patient experiences



Business Pearls

* Promote solutions to patient problems
* Convert, retain and gain referrals from patients (WOW experience)
* Most patients check out issues online first not in clinic
* All staff trained concept being promoted
* Don’t under estimate the competition
* Communicate consistently with patients



## Publications

Berros, P. (2010) Periorbital Contour Abnormalities: Hollow Eye Ring Management with Hyaluronstructure. Orbit. 29(2) 119 – 125

Downie, J. et al (2009) A double-blind, clinical evaluation of facial augmentation treatments: comparison of PRI 1, PRI 2, Zyplast and Perlane Journal of Plastic, Reconstructive & Aesthetic Surgery 62; 1636 – 1643

Hirmand, Haideh (2010) Anatomy and Nonsurgical Correction of theTear Trough Deformity PRS Journal 125(2): 699 - 708

Moss, C. J. et al (2000) Surgical Anatomy of the Ligamentous Attachments in the Temple and Periorbital Regions. Plastic and Reconstructive Surgery 105 (4) 1475 – 1490

Stocks, D. et al (2011) Rheological Evaluation of the Physical Properties of Hyaluronic Acid Dermal Fillers. J Drugs Dermatol 10(9):974 - 980

Williams, S. (2010) The 3-D Approach to Cosmetic Dermatology Derma 1: (2) 59 - 66

