DR.DENIZ KANLIADA

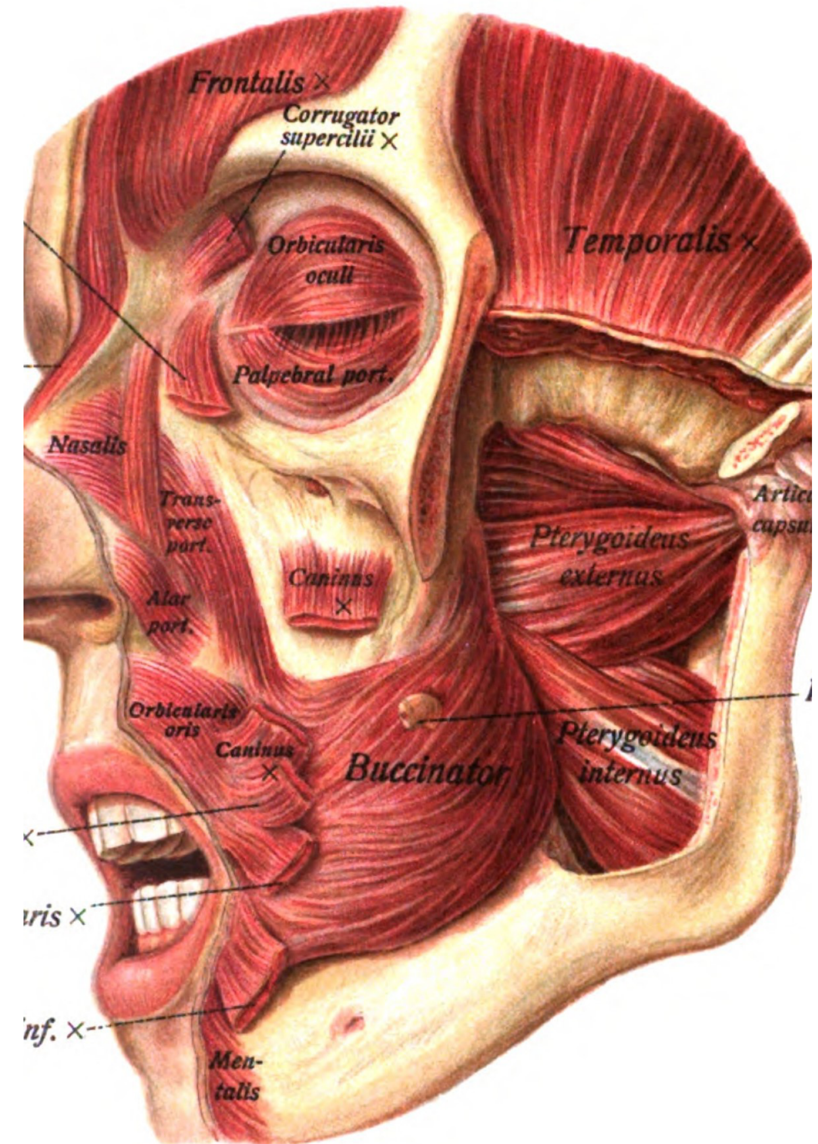
FOUNDER AND CEO
@LONDON_COSMETIC_SURGEON
@NOSE_KING

Virtual
Aesthetic Doctor

EXTERNAL ANATOMY OF THE NOSE

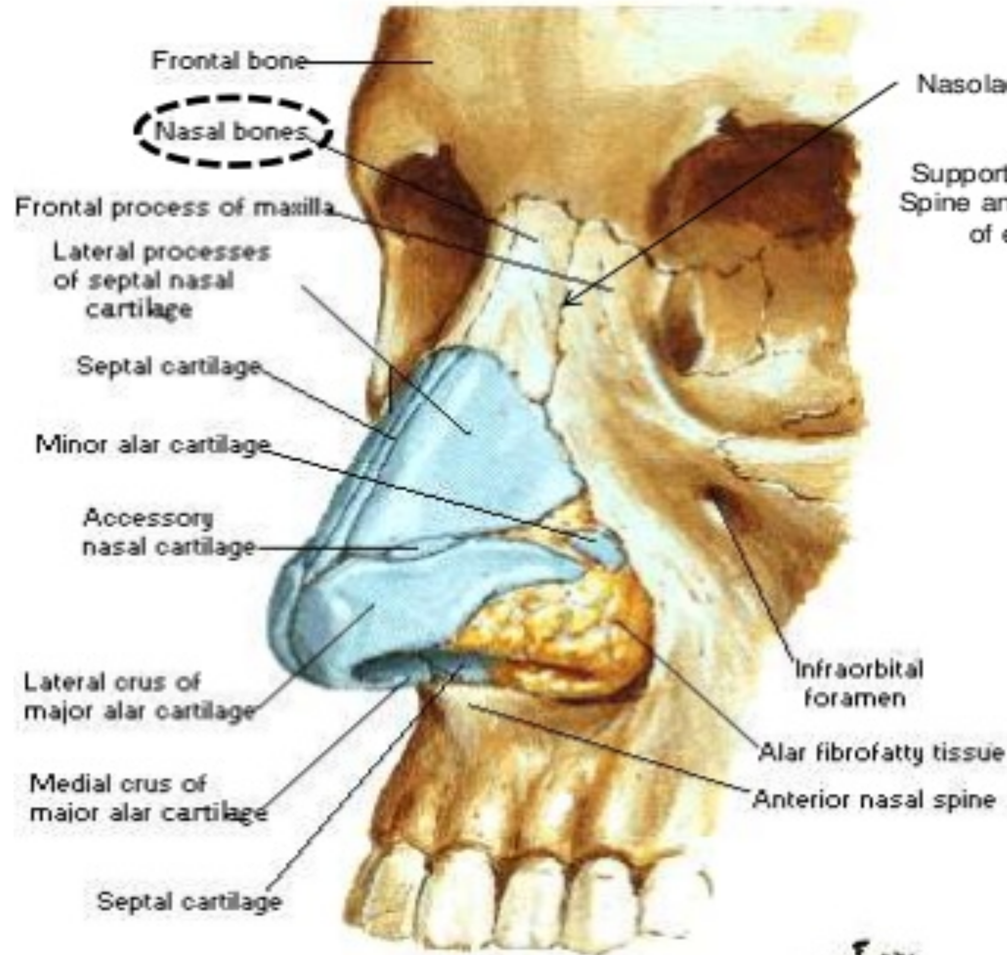
- Upper 1/3 of the nasal skin is thin with a thicker fat layer
- Lower 2/3 especially supra tip and tip skin is thicker and has a thin fat layer.
- As a result of this I recommend using different products on both areas.

- M.nasalis is the main muscle which is responsible from alar flaring when breathing. Especially the alar portion.
- Trigeminal nerve (maxillary branch)is responsible for sensory innervation and facial nerve is for the motor innervation.

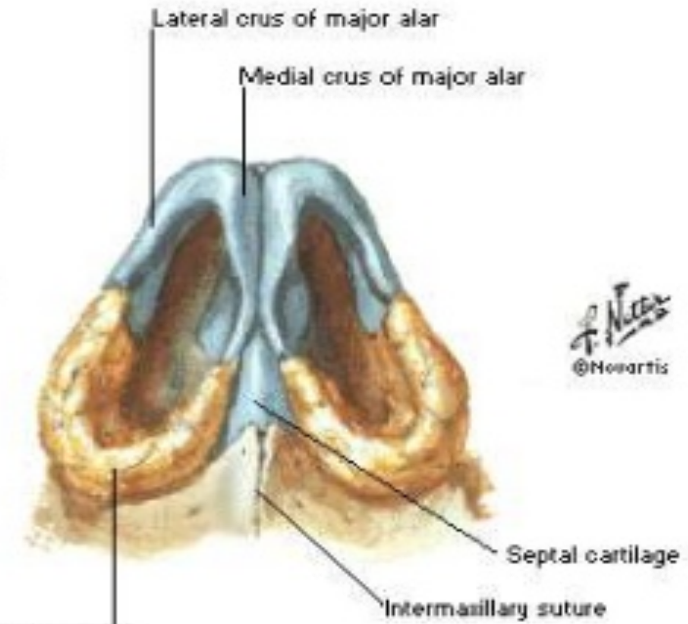


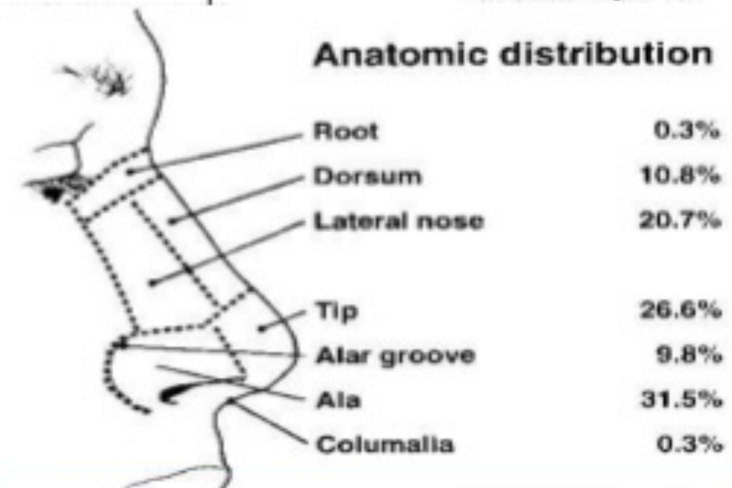
DR.DENIZ KANLIADA

Nose [Skeleton]
Anterolateral View



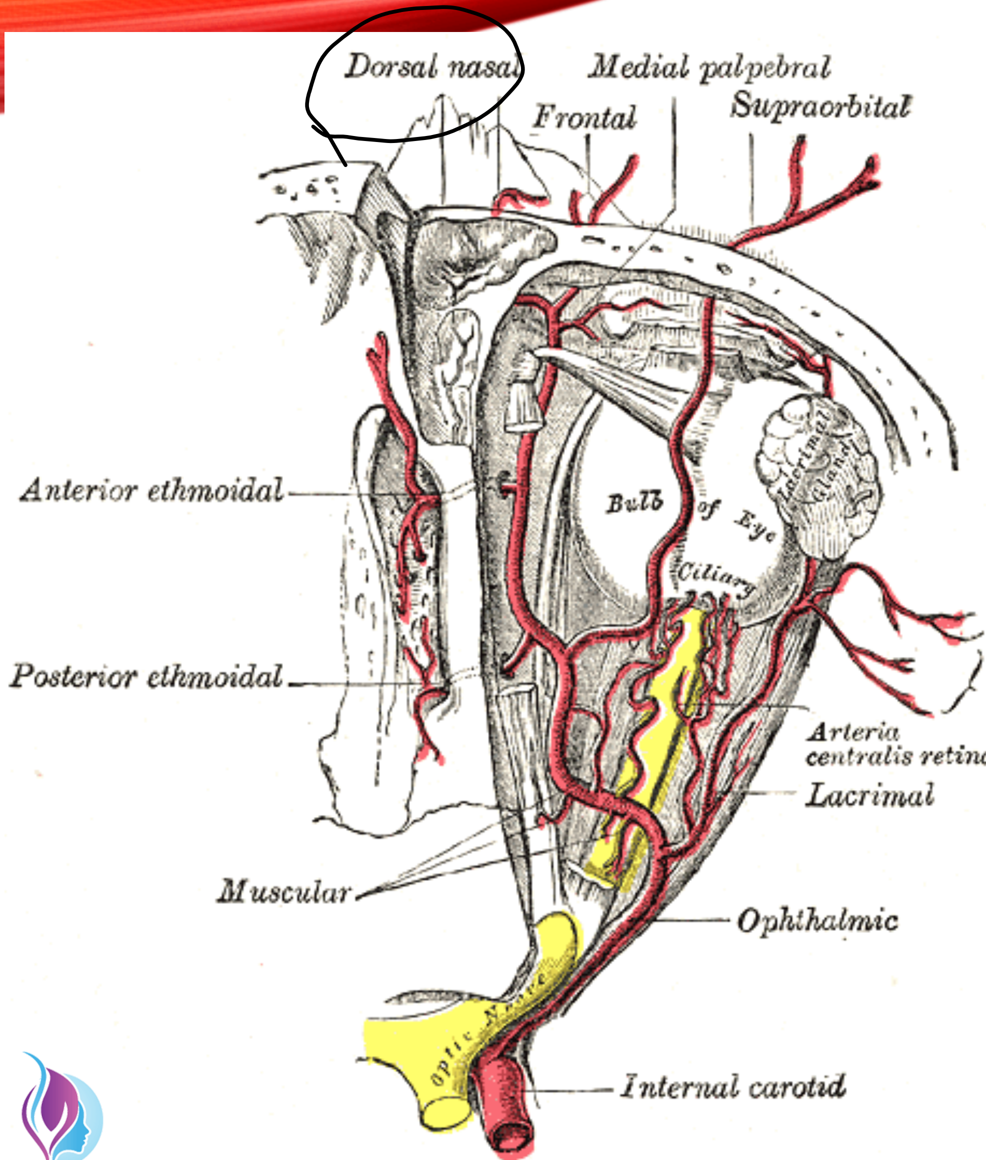
Nose [Skeleton]
Inferior View





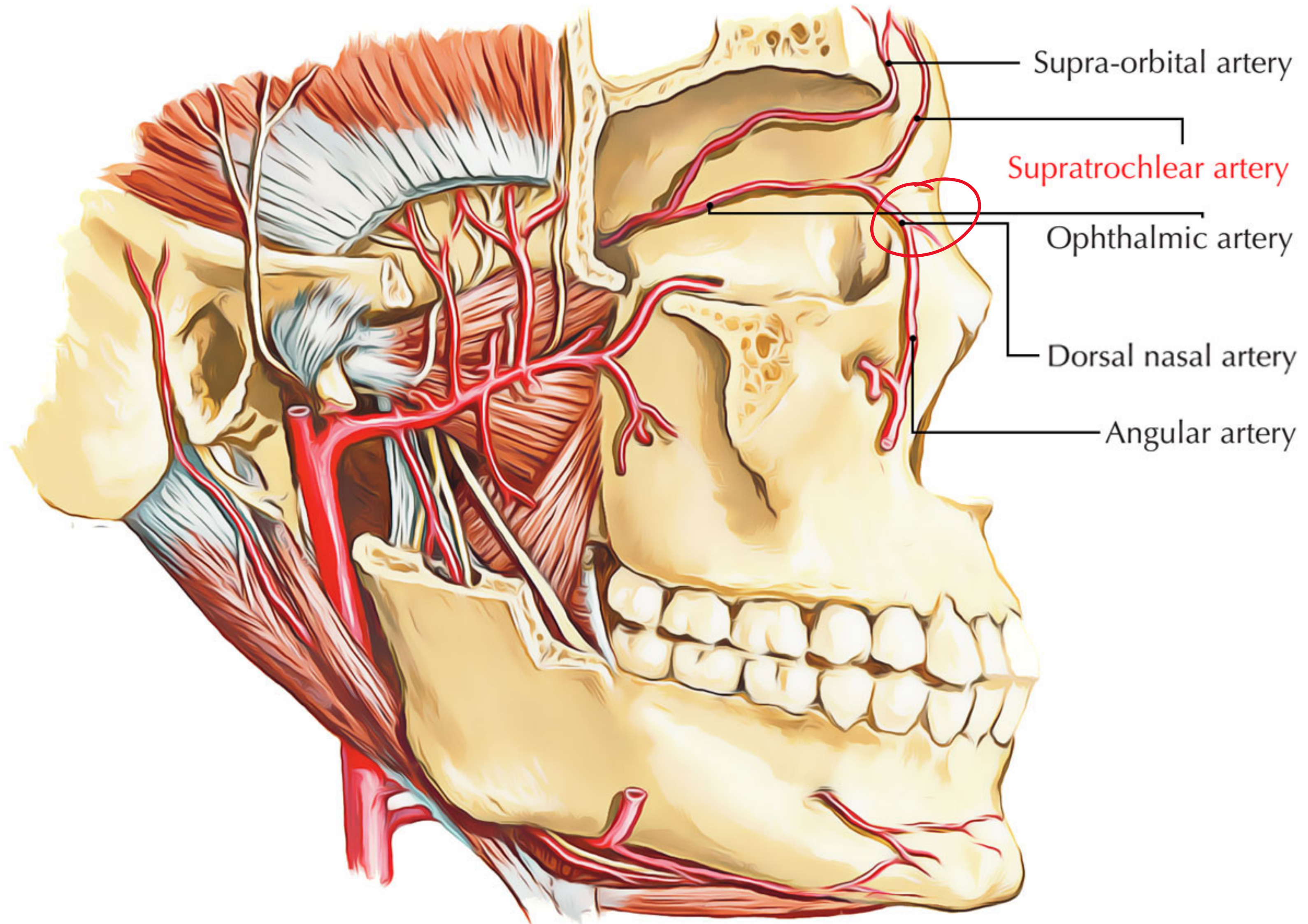
DR.DENIZ
KANLIADA

BLOOD SUPPLY

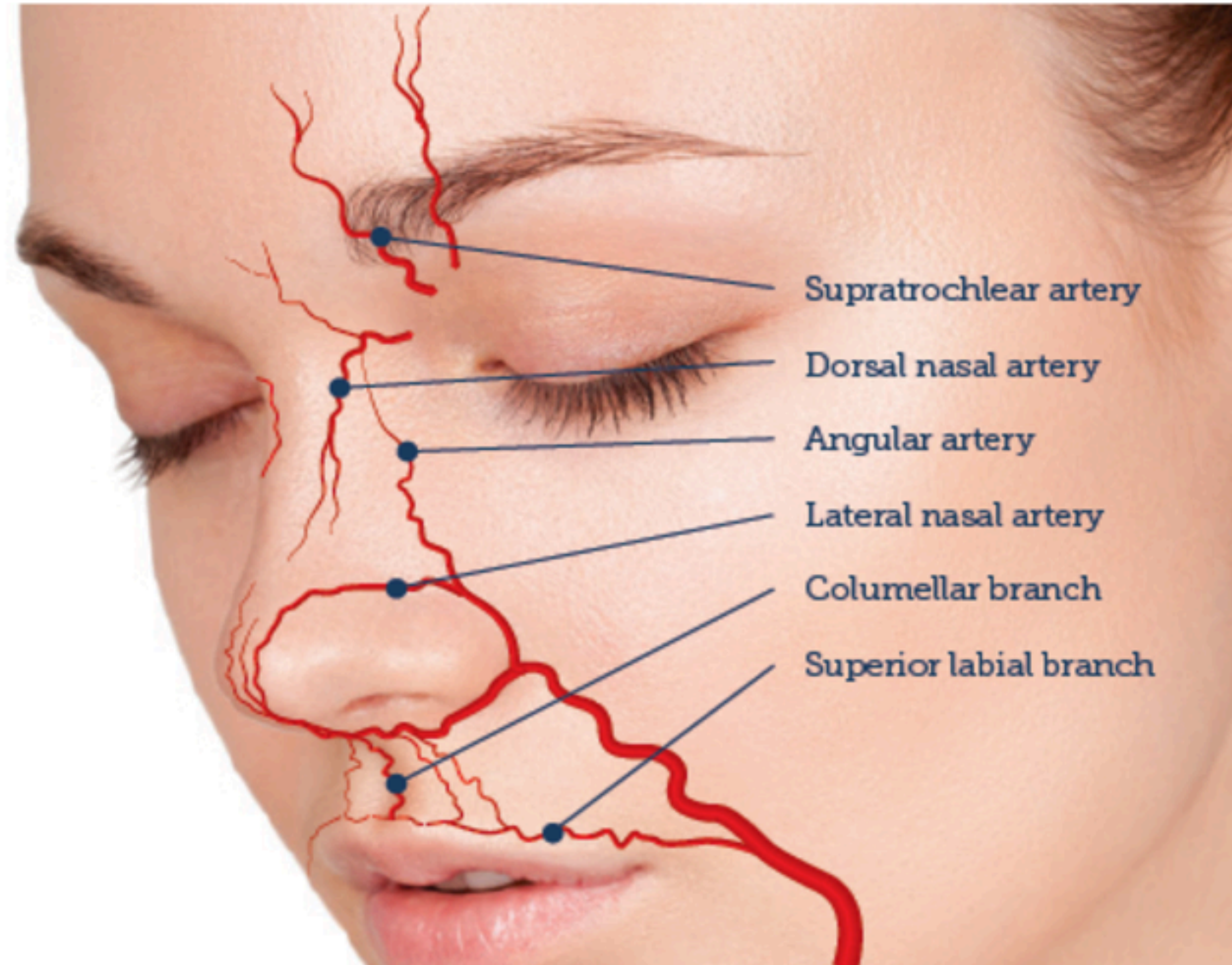


Parietal branch
Frontal branch
Middle Temporal
Orbital
Facial
Masseter
Sterno-cleido-mastoideus
Angular
Lateral nasal
Septal
Superior labial
Inferior labial

DR.DENIZ
KANLIADA



DR.DENIZ
KANLIADA



DR.DENIZ
KANLIADA

DANGER ZONES

- Angular artery is one of two terminal branches of facial artery and ascends along the lateral aspect of the nose. The branches of the angular artery anastomoses with the infra-orbital artery and dorsal nasal branch of the ophthalmic artery.
- Lateral nasal artery (anastomoses with angular artery)
- Dorsal nasal artery (anastomoses with supratrochlear artery and then ophthalmic artery)

- Injections should be very medially and very deep down to bone and the cartilage as all the vascular structures lie in SMAS or above.

DR.DENIZ
KANLIADA

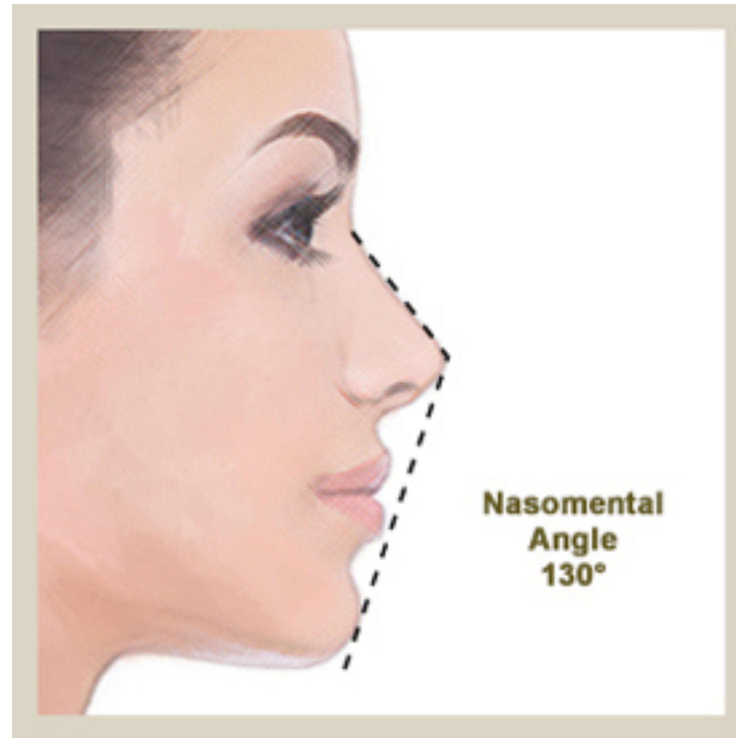
DANGER TRIANGLE OF THE FACE

- The **facial** vein is connected to cavernous sinus via the superior ophthalmic vein.
- The facial vein is **valveless** – blood can reverse direction and flow from the facial vein to the cavernous sinus.
- This provides a potential pathway by which infection of the face can spread to the venous sinuses.
- needs to be treated aggressively with antibiotics and blood thinners.

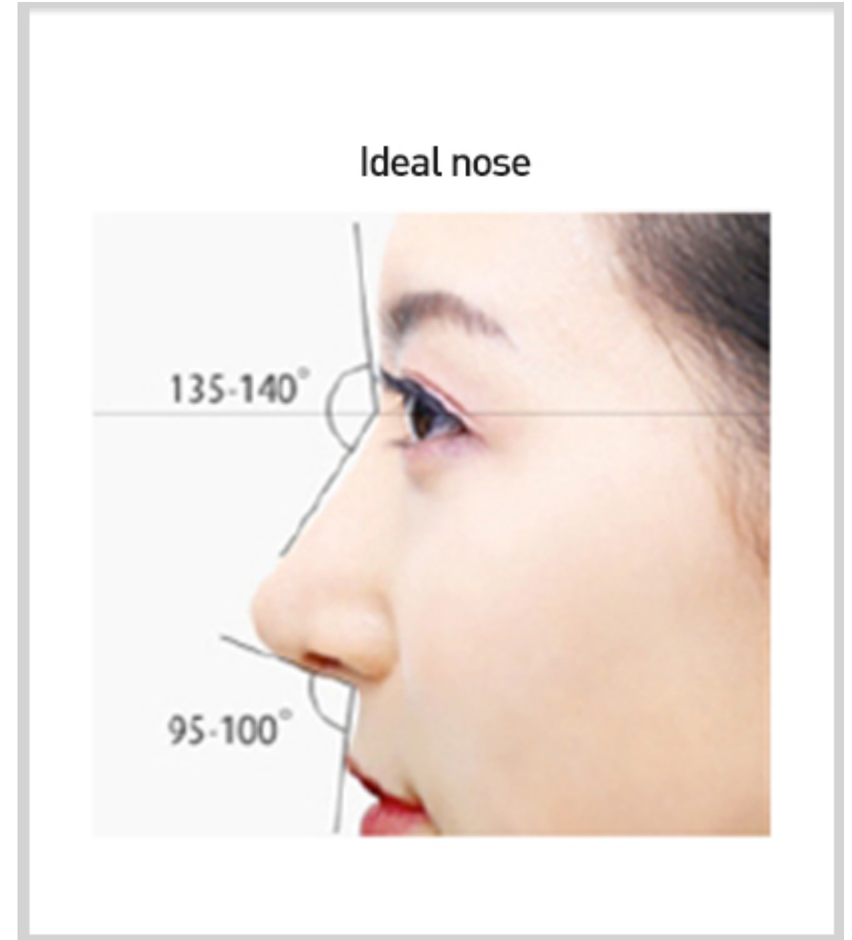
DR.DENIZ
KANLIADA

ANGLES

- Nasolabial
- Nasofrontal
- Nasomental

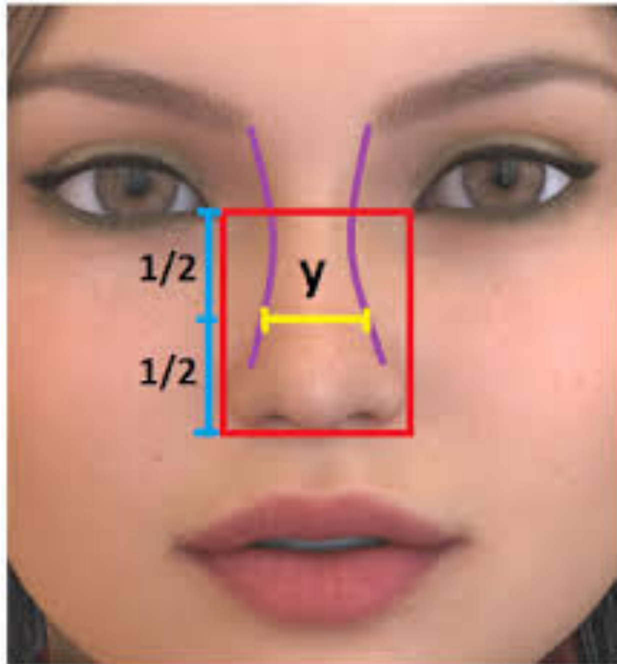


Nasomental Angle 130°



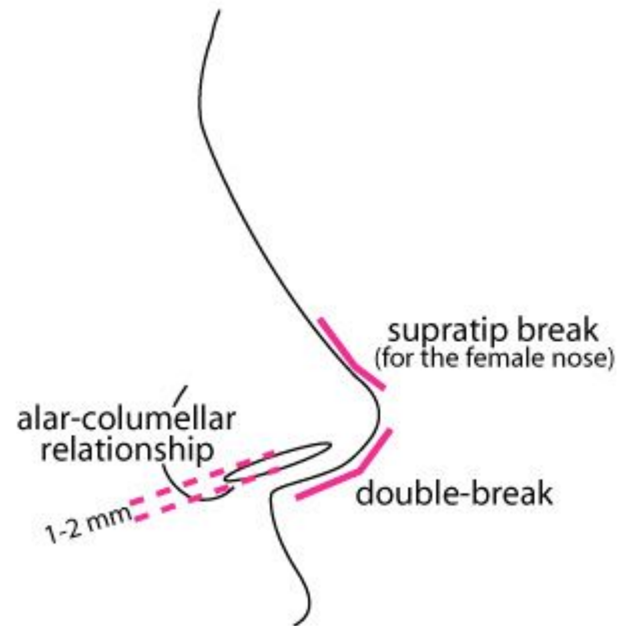
DR.DENIZ KANLIADA

DORSAL AESTHETIC LINES



DR.DENIZ
KANLIADA

SUPRA TIP BREAK



DR.DENIZ
KANLIADA

INDICATIONS

With an ideal hyaluronic acid filler and technique we can,

- correct dorsum problems,
- Increase the height of dorsum if needed
- increase the rotation and the projection of the tip,
- correct dorsal aesthetic lines,
- change the width of the nose,
- correct asymmetric nostrils,
- improve breathing..

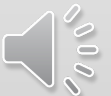
DR.DENIZ
KANLIADA

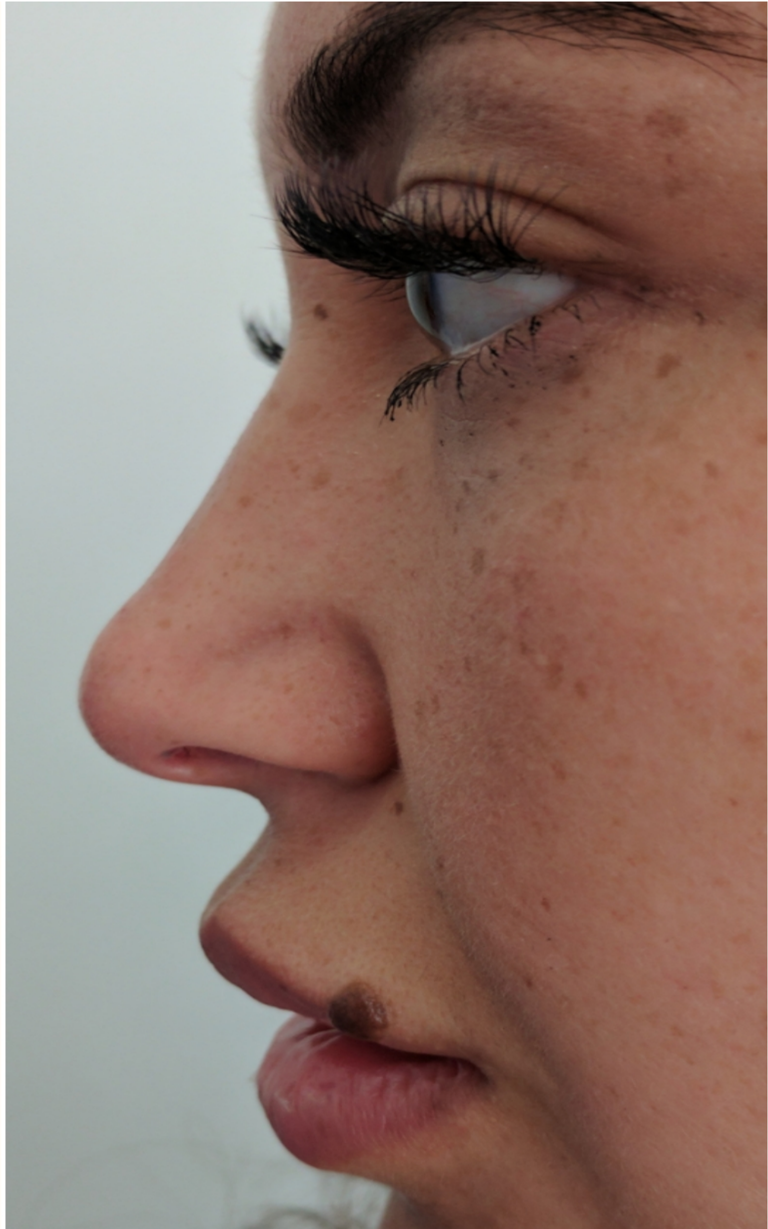
MAIN INJECTION SITES

- ***x1 - Nasolabial Angle (Anterior nasal spine):***
  - Injecting deep to anterior nasal spine will increase the nasolabial angle and the distance between columella and vermillion.
  - This will also slightly increase the projection of the nose.
  - Myomodulation; preventing droopy tip while talking (depressor nasi septi)
- ***x2 - Columella (Anterior septum)***

  Injecting in between medial crus footplates will increase tip projection and nasolabial angle.

DR.DENIZ
KANLIADA





MAIN INJECTION SITES

- ***x3 – Tip/Supratip Area***

  - Injecting in between the dome area you can increase the tip projection
  - can create a supratip break.
  - Supra tip dents due to surgery can also be corrected

DR.DENIZ KANLIADA

DR.DENIZ
KANLIADA

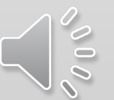
DR.DENIZ
KANLIADA

MAIN INJECTION SITES

- ***x4-<u>Cartilaginous Dorsum</u>***
  - You can balance the dorsal aesthetic lines especially if the patient had a rhinoplasty and has asymmetric dorsal aesthetic lines.
  - Injections should be deep to SMAS down to the perichondrium.

- ***x5 - <u>Bony Dorsum</u>***
  - You can adjust the height and the width of the bony septum.
  - You can straighten the dorsal hump
  - Correct irregularities after surgery
  - Injections should be deep to the periosteum to prevent further bleeding, bruising or injecting into a blood vessel.

DR.DENIZ
KANLIADA

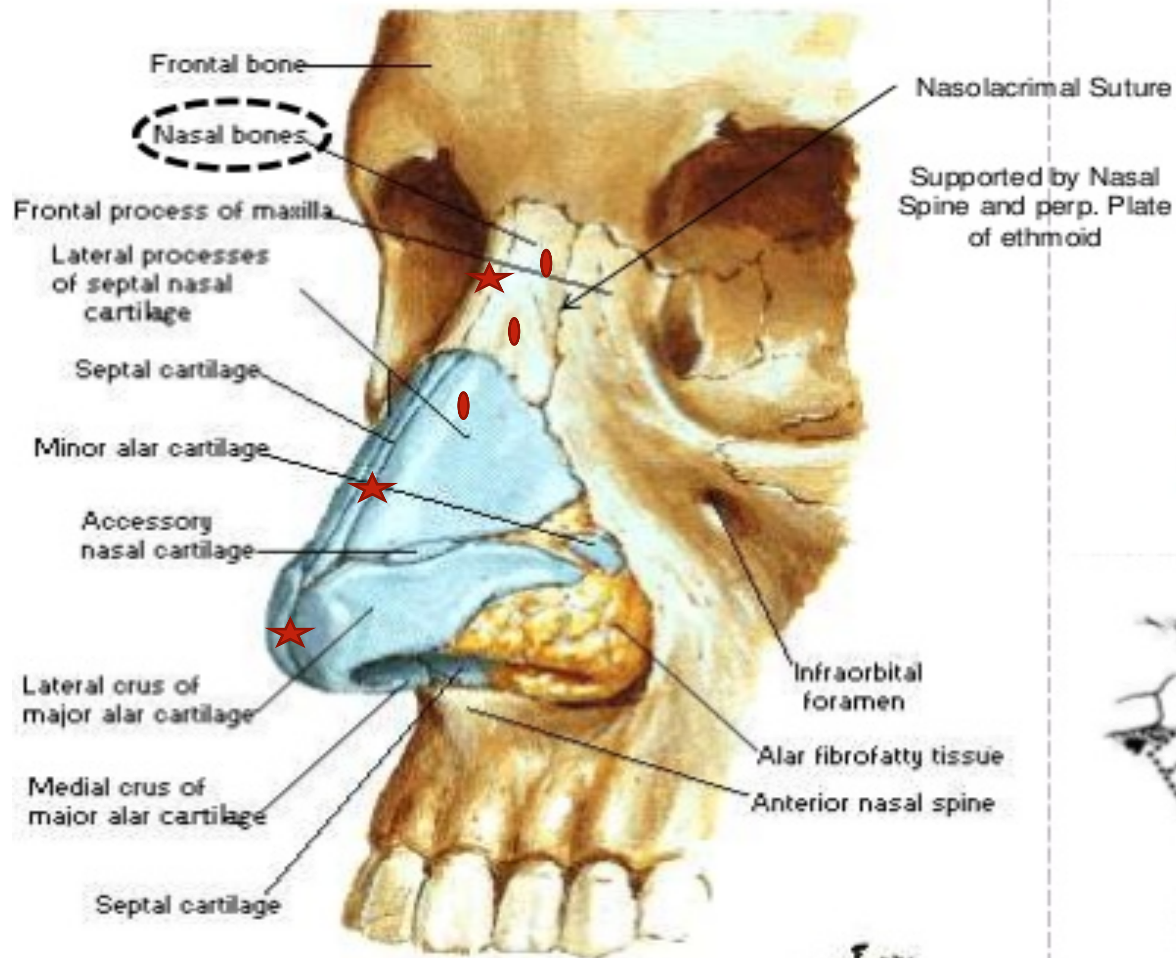


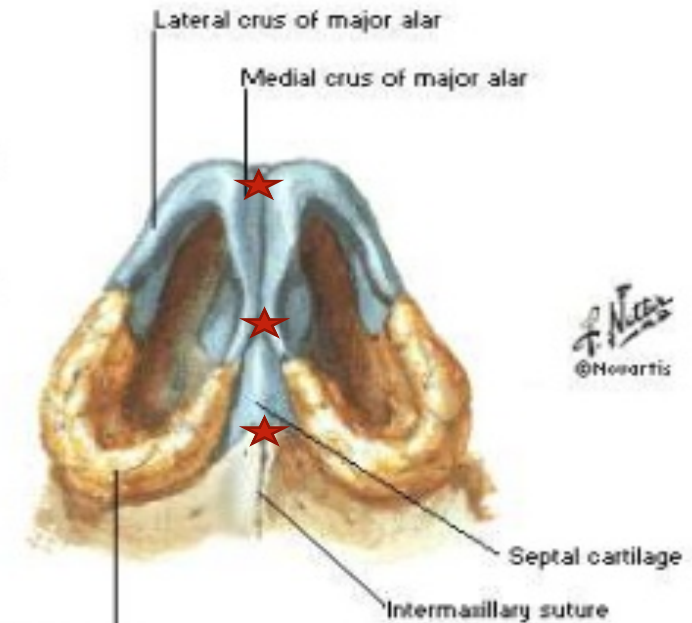
DR.DENIZ
KANLIADA

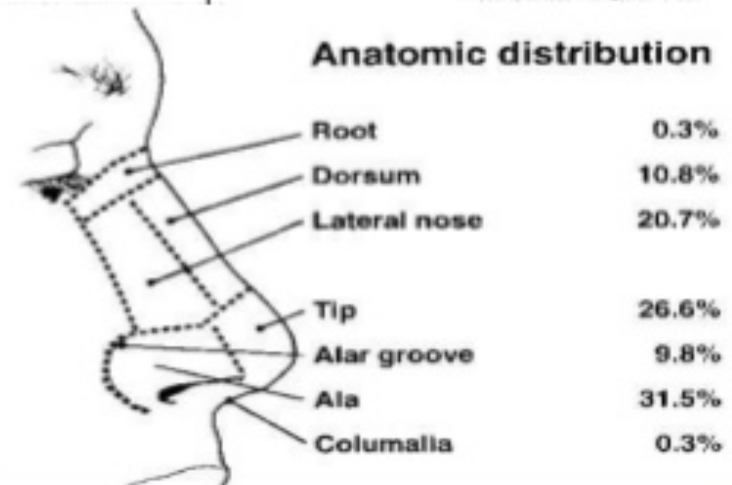
DR.DENIZ
KANLIADA

★ bolus

⬮ Micro droplets



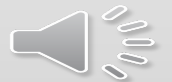




DR.DENIZ KANLIADA

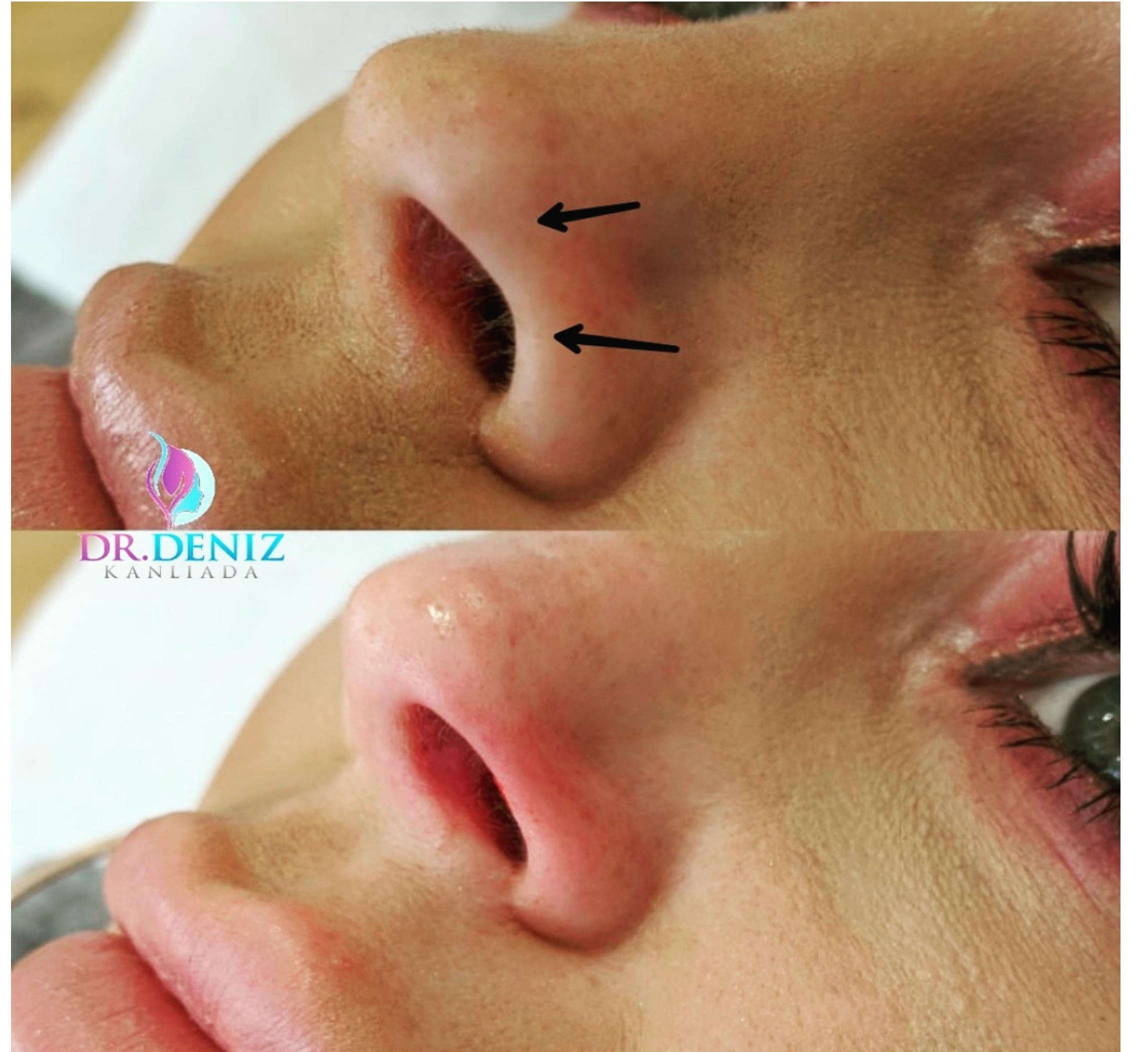
MAIN INJECTION SITES

- X6 ***Alar lobule***
  - can correct the pinched appearance on the sides after a surgical rhinoplasty due to cartilage loss
  - Helps to decrease columellar show by lowering the lateral cartilages



DR.DENIZ KANLIADA

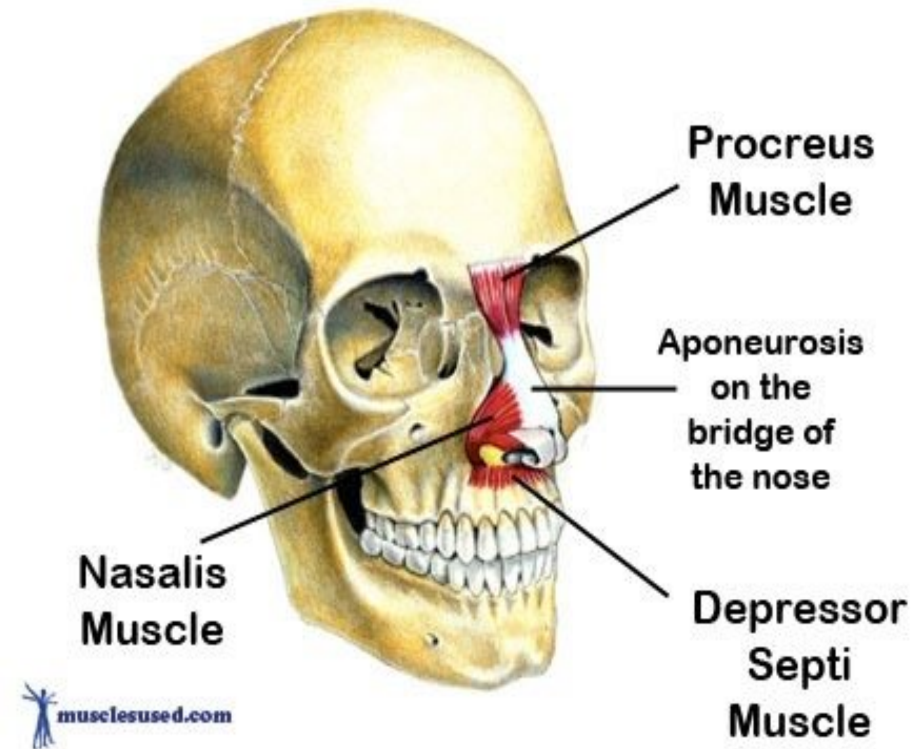
DR.DENIZ
KANLIADA


DR.DENIZ
KANLIADA

A USEFUL TIP WITH BOTULINUM TOXIN

- 5-10 units of Dysport or Azzalure / 2-4 units of BOTOX to M.Depressor Nasi septi to increase the tip projection and prevent tip drooping while talking or smiling.

- Also if the patient has wide nostrils due to increased flaring you can put 5 units of Dysport or Azzalure / 2 units of BOTOX to Alar portion of M.Nazalis (M.dilator naris) to narrow the nostrils.



DR.DENIZ KANLIADA

WHICH PRODUCT TO USE ??

- Hyaluronic acid fillers may be differentiated in degree of crosslinking, concentrations, gel hardness and cohesivity
- ***Viscosity*** measures the force required to push a product through a syringe, and is directly proportional to the G prime
- ***G prime*** represents gel hardness and is measured by placing a specific amount of HA product between two metal plates then measuring how much force it takes to slide one plate against the other.
- The more force that is needed, the harder the product is.
- ***Cohesivity*** expresses the amount of pressure required to press two plates together like a sandwich when a particular HA product has been applied between the plates.
- Vertical standing of the fillers depends on higher cohesivity of the filler.

DR.DENIZ
KANLIADA

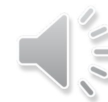
BRANDS

- Perlane has the highest G prime, followed by Restylane. Juvaderm is in the middle. Not ideal to tip, columella or alar injections!
- Restylane has higher viscosity than Juvaderm range
- Juvaderm range has higher cohesivity than Restylane and Perlane.
- Non HA brands are not recommended as they are not reversible.

DR.DENIZ
KANLIADA

COMPLICATIONS

- Early : Hours to days
- Delayed : Weeks to years



DR.DENIZ
KANLIADA

EARLY

- Edema
- Pain
- Erythema
- Ecchymosis
- Itching
- Tyndall Effect
- Infection (Bacterial or Herpes Simplex)
- Vascular occlusion

DR.DENIZ
KANLIADA

LATE

- Biofilm formation
- Granuloma
- Scarring
- Dyspigmentation

- Vascular occlusion due to compression

DR.DENIZ
KANLIADA

VASCULAR OCCLUSION

- Localized – skin necrosis
- Distant – blindness, cerebral ischemia

Arterial occlusion :

- Immediate blanching, pain – if not treated erythema, purpura, pustulation and ulceration then scarring
- Capillary refill will be longer than 4 seconds
- Skin will look darker in time

Venous occlusion :

- Persistent dull pain with erythema and swelling.
- Capillary refill can be shorter than 4 seconds
- Skin colour will look bluish

DR.DENIZ
KANLIADA

PREVENTING

- Aspiration
- Low injection pressure
- Blunt cannulas?(there are more blindness complications in the literature with cannulas)
- Do not over treat

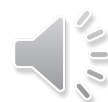
DR.DENIZ
KANLIADA

EMERGENCY PROTOCOL

- Stop injecting
- Immediate injection of hyaluronidase (min 10-30 IU per 0.1ml of HA)
- Warm compress and massage
- Capillary refill should be less than 4 secs if not succeeded in 60mins you can repeat it up to 4 cycles
- 325 mg aspirin twice a day 7 days to use when sending home
- Review every day if not possible every 48 hours
- If necrosis is progressive hyperbaric oxygen

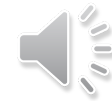
- Sildenafil, steroids, iv prostaglandins are also beneficial

DR.DENIZ
KANLIADA



- Blindness:

Call ambulance and if you are competent enough inject
200 IU of hyalase retro orbitally is needed to be injected infero laterally.



THANK YOU

- For support and help please send me an email on dkplastix@gmail.com

- Also follow all our action on my Instagram profile

@london_cosmetic_surgeon