### STANDARD POSITION 4: MIDFACE







# **STANDARD POSITION 4: MIDFACE**

• Start by locating the zygomatic major muscle by placing the probe at the zygomatic bone. Follow the muscle downwards and observe tissue appearing under the zygomatica major muscle. This is the deep medial cheek (DMC) fat pad. Above is the superficial fat pad

Should you wish to inject into the DMC, try to find a safe way of entry for a canula

• Start at the modiolus and try to identify the different muscles inserting: orbicularis oris (superior part), zygomatic major, risorius, DAO, orbicularis oris (inferior part)

When injecting toxin in the DAO, in what part do you stay clear from the DLI?

• Locate the infraorbital foramen. Observe whether an artery is emerging from the foramen

Mark the foramen on the skin. This would be your entry for a nerve block of the lower lip

- Look for the zygomatic facial foramen Injecting filler on the bone in that area can cause chronic pain
- Place the probe in a transversal position in the medical corner of the eye. Measure the distance from skin to bone. Locate the angular vein (no compression with the probe!) Measure the width of the angular vein.

## Where would you place the filler?

Mark the area where you would inject on the zygomatic bone. Place the middle of the probe on this mark. Locate the SMAS, the SOOF and the pre-zygomatic space.

Are there any vessels in the way that can be injured by injection?

• Place your probe vertical above the parotid gland and follow the SMAS all the way up into the temples crest and forehead (although it changes name it is still the same fascia )

Observe the width of the subcutaneous space

#### Vessels

- Follow the <u>angular vein</u> from the medial corner of the eye downwards. First with doppler off, than with doppler on. See if it matches *This vein divides the deep medial cheek fat pad from the lateral and determines the effect of fillers*
- Locate the <u>facial artery</u> with doppler at the corner of the mouth. Follow it upwards to the pyriform space (Ristow's): in which layer can you localize the artery?

This answers the question whether you can inject superficial and/or deep

More cranially: do you see the bifurcation with the lateral nasal artery? *You do not want to inject there* 

## Fillers

- If you see any filler in your model:
  - What type of filler is it?
  - Is it injected in the correct plane?

#### Additional exercises

- Locate the orbicularis oculi muscle in the lower eyelid placing the probe vertically. Glide medial to lateral to find the most caudal end of the muscle. Mark this point with a pen on both sides. Measure the distance from the edge of the lower eyelid.
- Fat compartments. Can you find these and measure their maximal thickness

## **Superficial**

- $\circ$  Nasolabial
- o Middle cheek
- o Lateral cheek
- o Chin

## <u>Deep</u>

- Medial deep cheek fat pad
- Lateral deep cheek fat pad (Buccal)
- o Medial and lateraal SOOF
- Pyriform space

These fat pads are separated from each other by fascia or ligaments. Can you identify these on your ultrasound image?