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FACIAL ANATOMY

Layer by Layer



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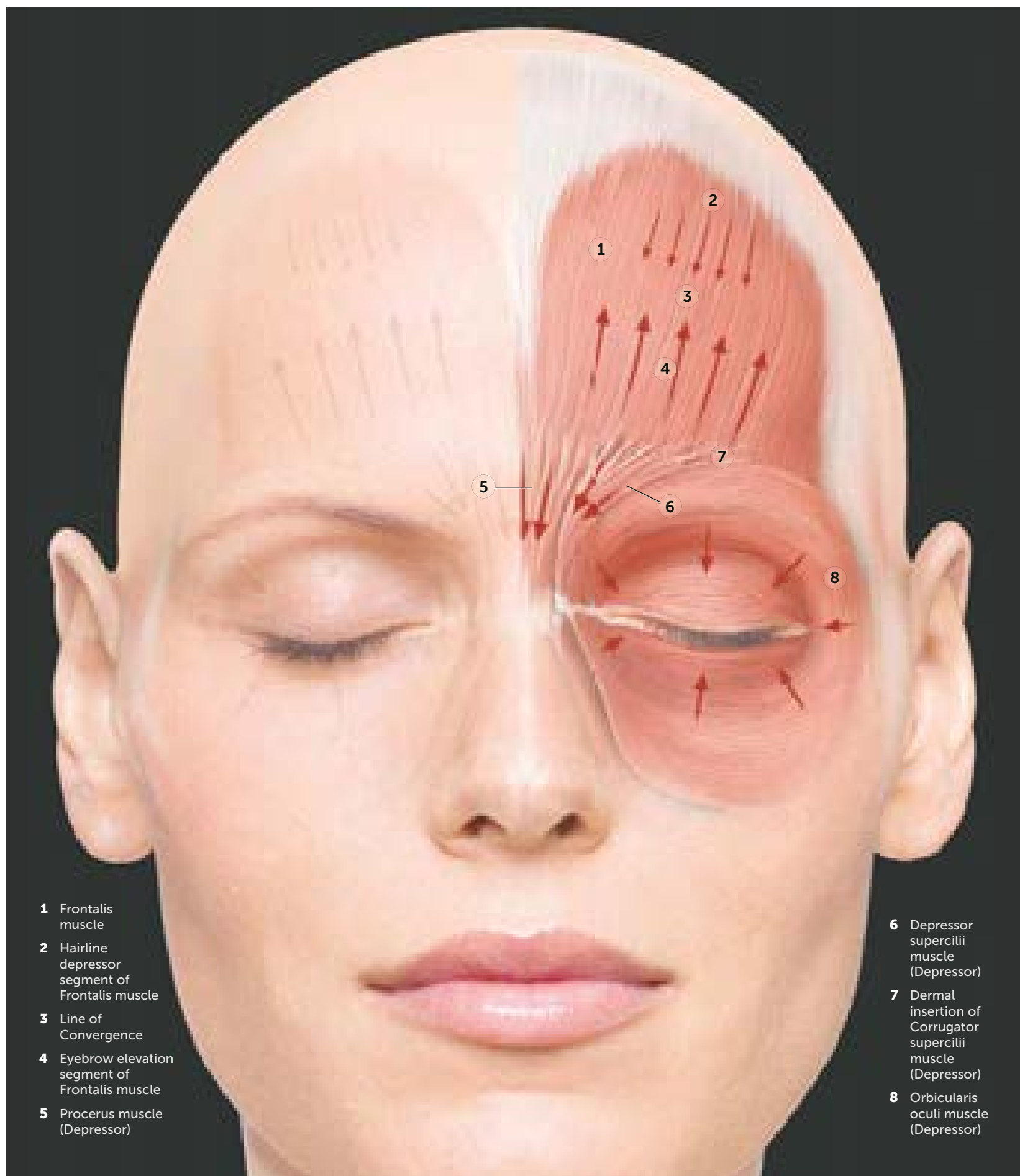
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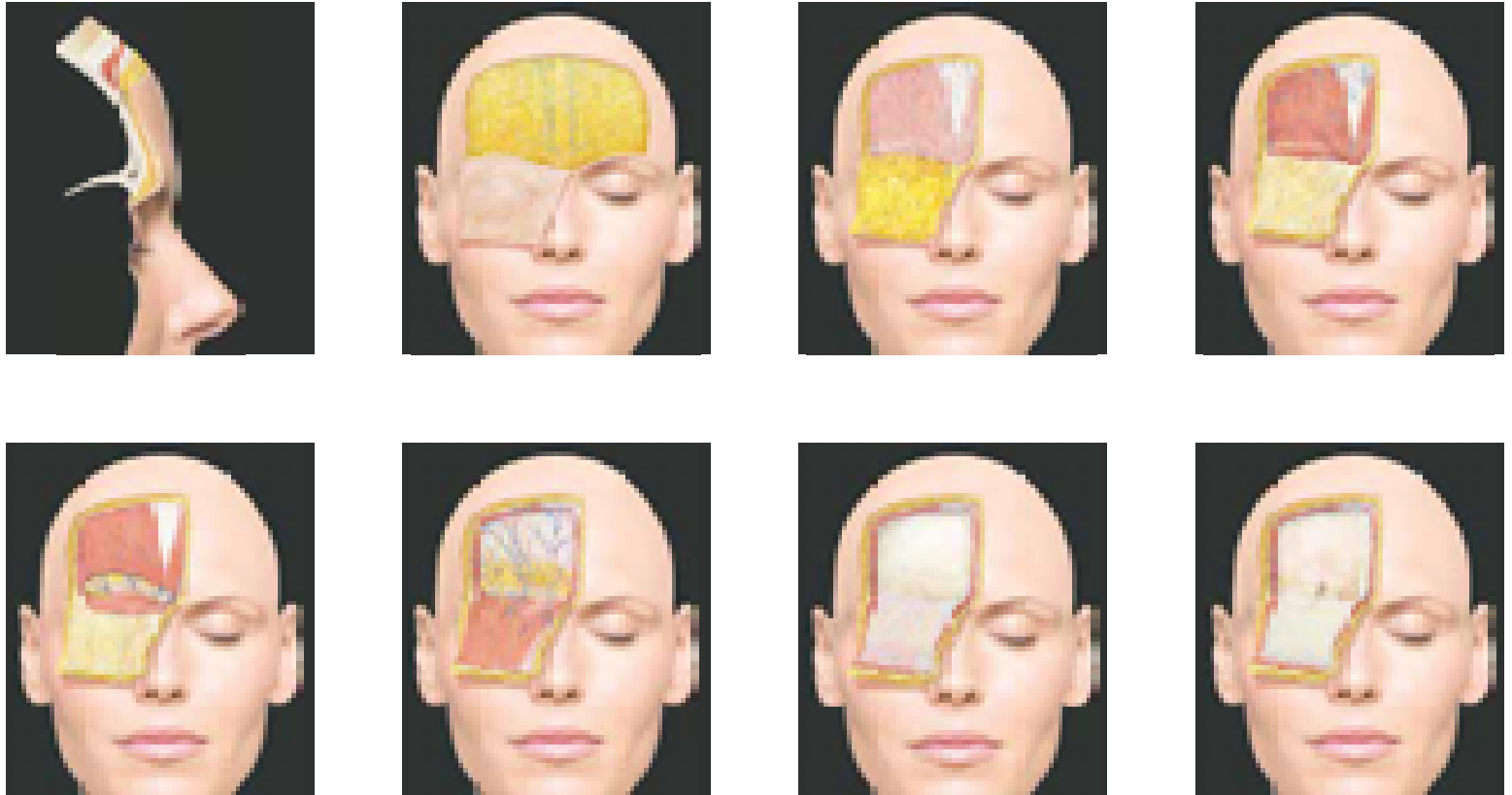
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3 Contraction direction of the muscles involved in eyebrow positioning.

Forehead: Anatomic Layers



The forehead contains eight different fascial layers:

1. Skin
2. Superficial fatty layer (arranged in compartments)
3. Suprafrontalis fascia
4. Frontalis muscle
5. Retrofrontalis fatty layer (arranged in compartments)
6. Subfrontalis fascia
7. Loose connective tissue (arranged in compartments)
8. Periosteum

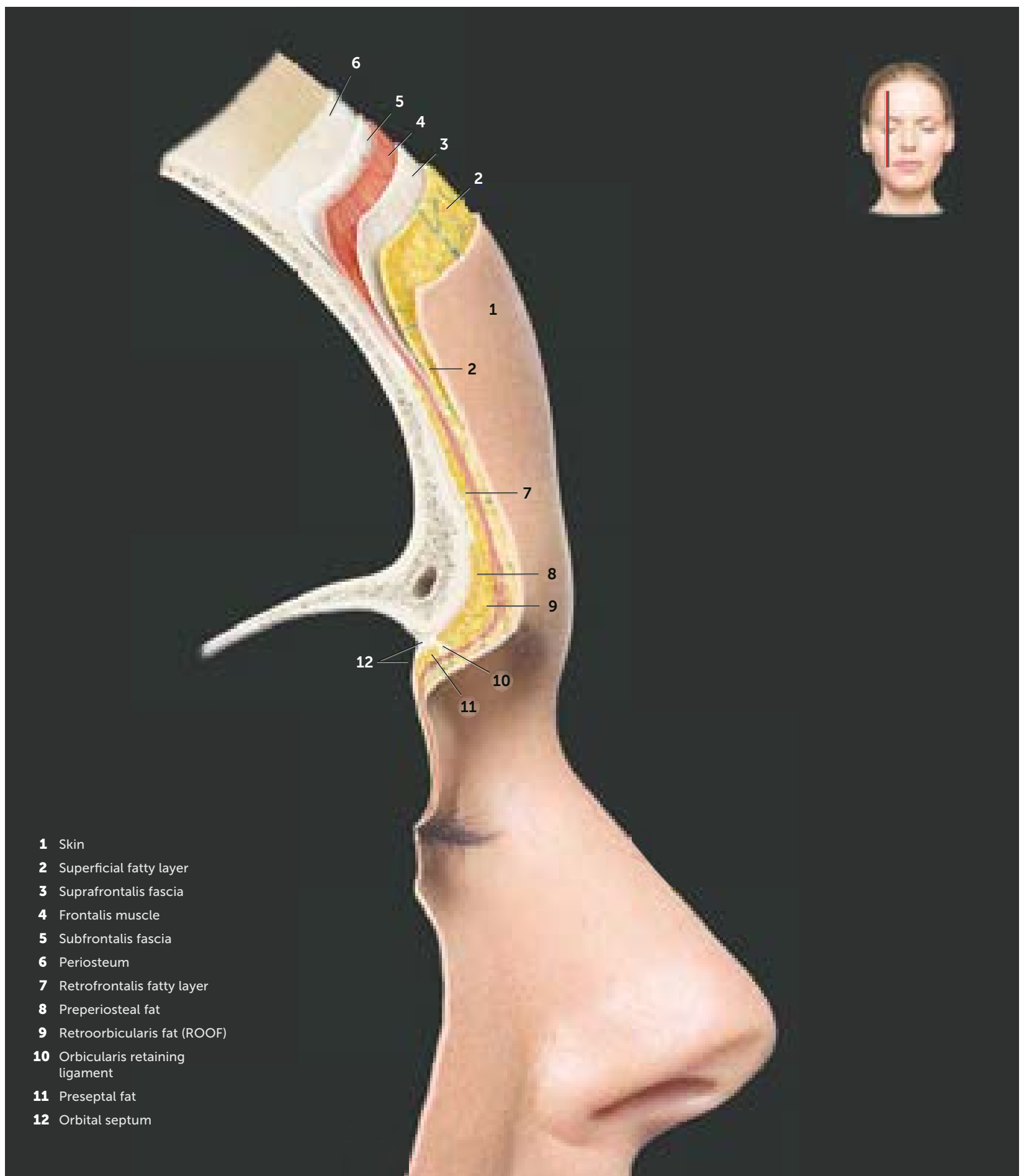
When tracing the five layers of the scalp into the forehead, it becomes evident that the galea aponeurotica separates into three distinct fascial layers:

1. Suprafrontalis fascia
2. Frontalis muscle
3. Subfrontalis fascia

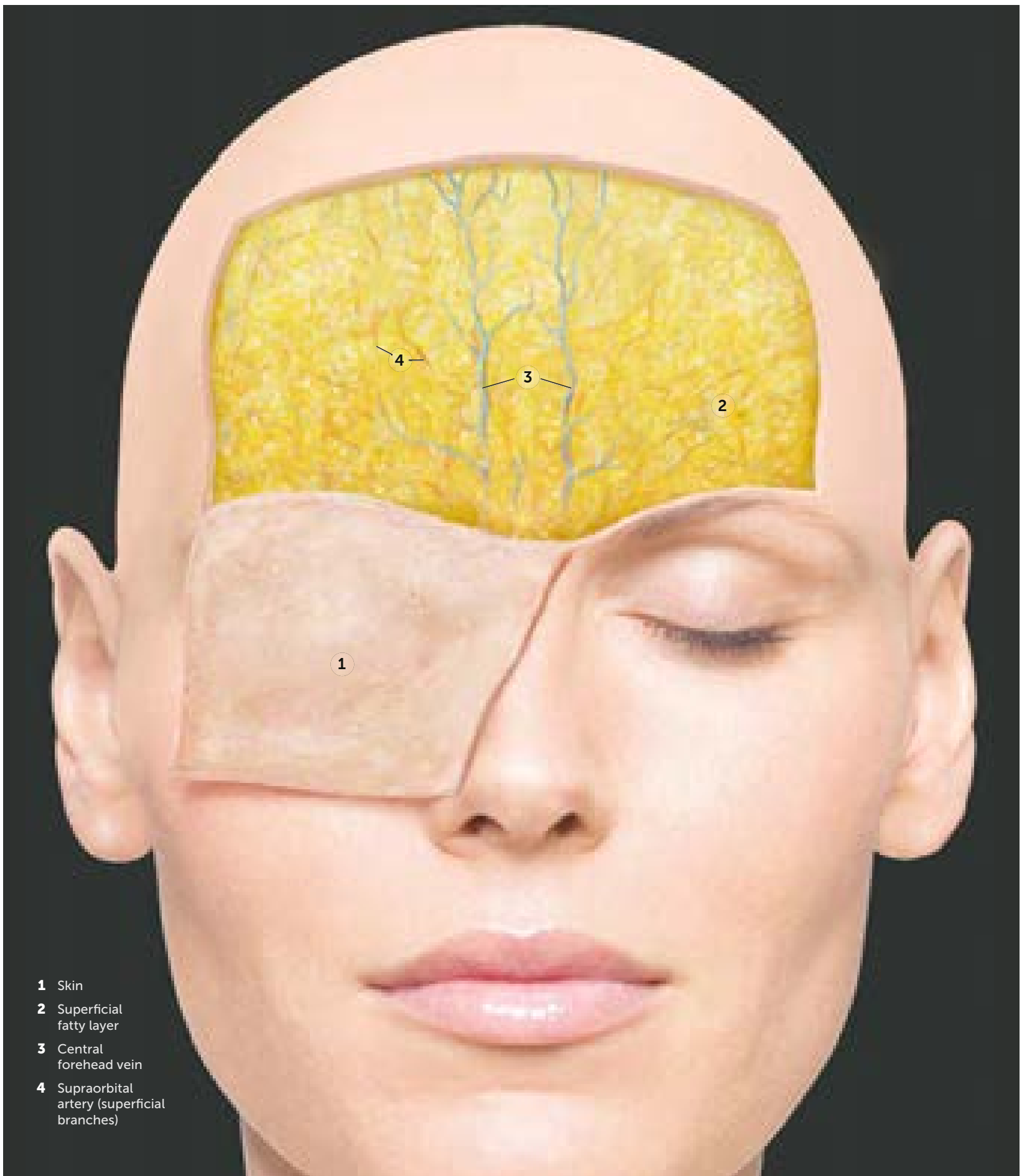
This separation explains the pathway of the neurovascular structures as they emerge from their respective foramina and make their way cranially into the hair-bearing region of the head.

The subfrontalis fascia connects to the supra-orbital periosteum, giving rise to the middle and inferior frontal septa; the space between these septa is termed the supraorbital ligamentous adhesion.

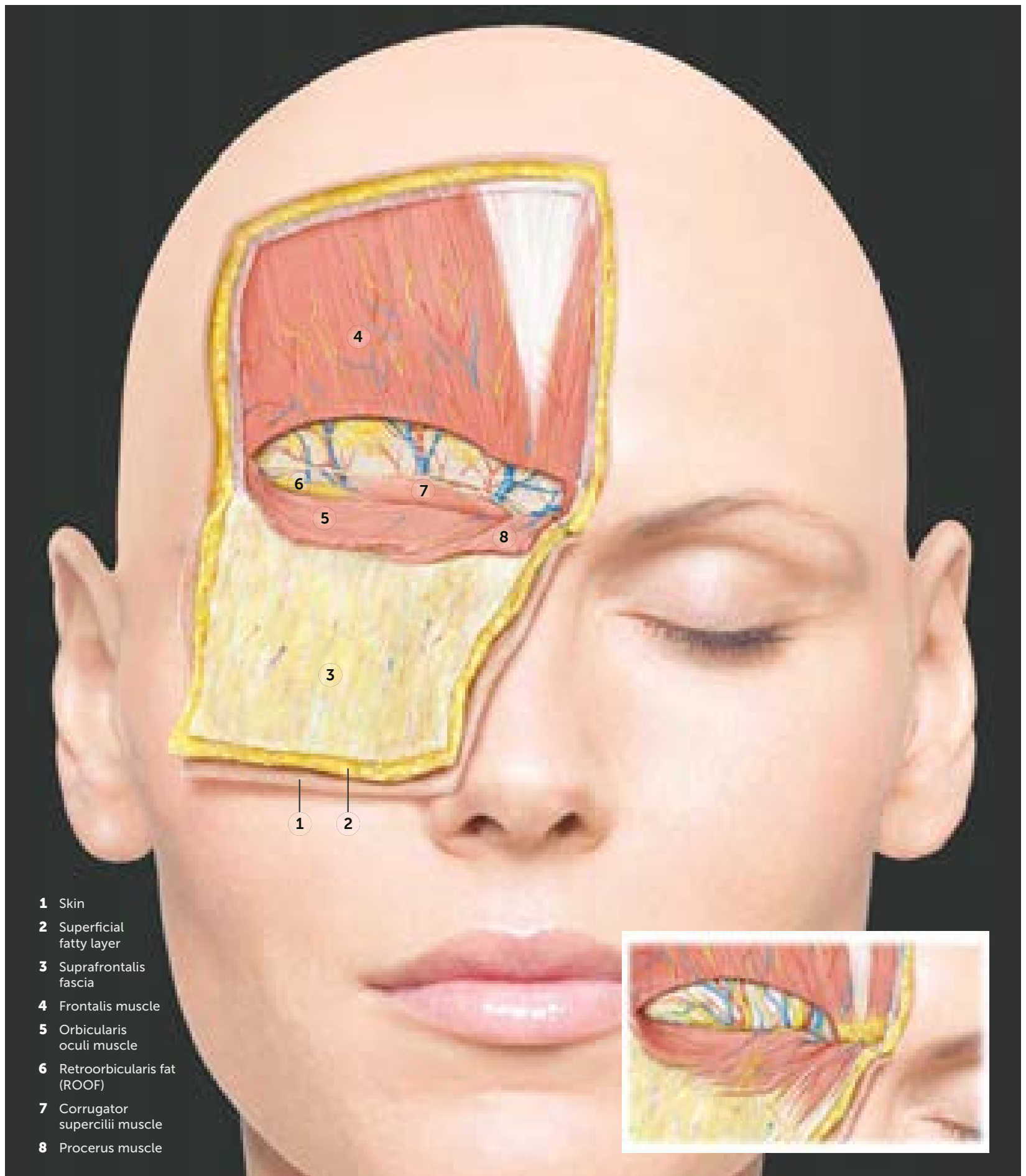
The inferior frontal septum forms the upper boundary of the corrugator supercilii muscle and serves as a protective membrane.



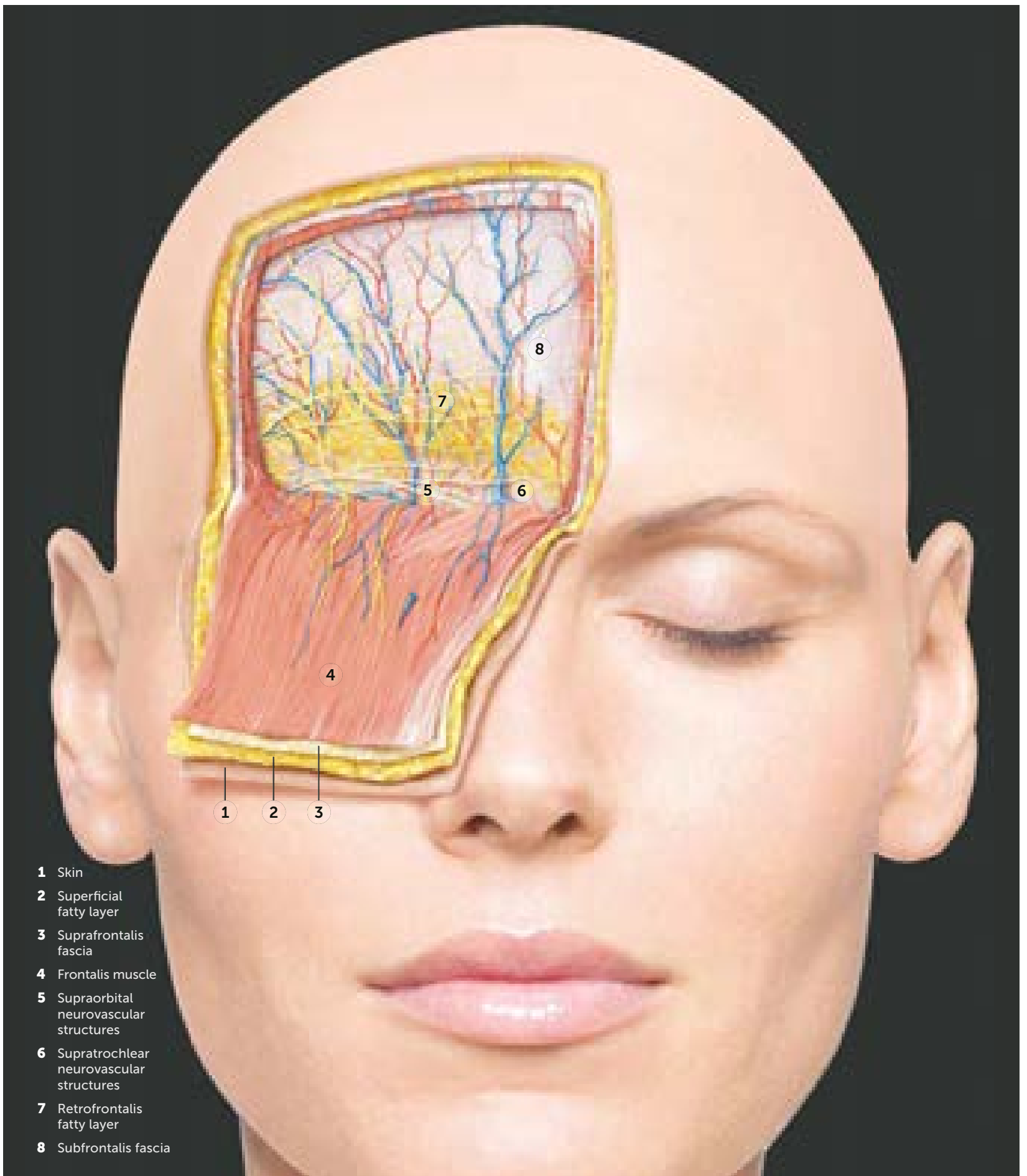
4 Layers of the frontal region in side view.



5 View of the superficial fatty layer (layer 2) after reflecting the skin.



8 Reflection of the skin, superficial fatty layer, suprafrontalis fascia, and the eyebrow depressor muscles. The retro-orbicularis oculi fat (ROOF) is exposed. *Small image:* The ROOF and the retrofrontalis fatty layer have been removed to expose the main trunk of the supraorbital and supratrochlear neurovascular structures.



9 Reflection of the skin, superficial fatty layer, suprafrontalis fascia, and frontalis muscle. The retrofrontalis fatty layer is exposed, showing the pathway of the supraorbital and supratrochlear neurovascular structures as they travel superficial to the subfrontalis fascia.

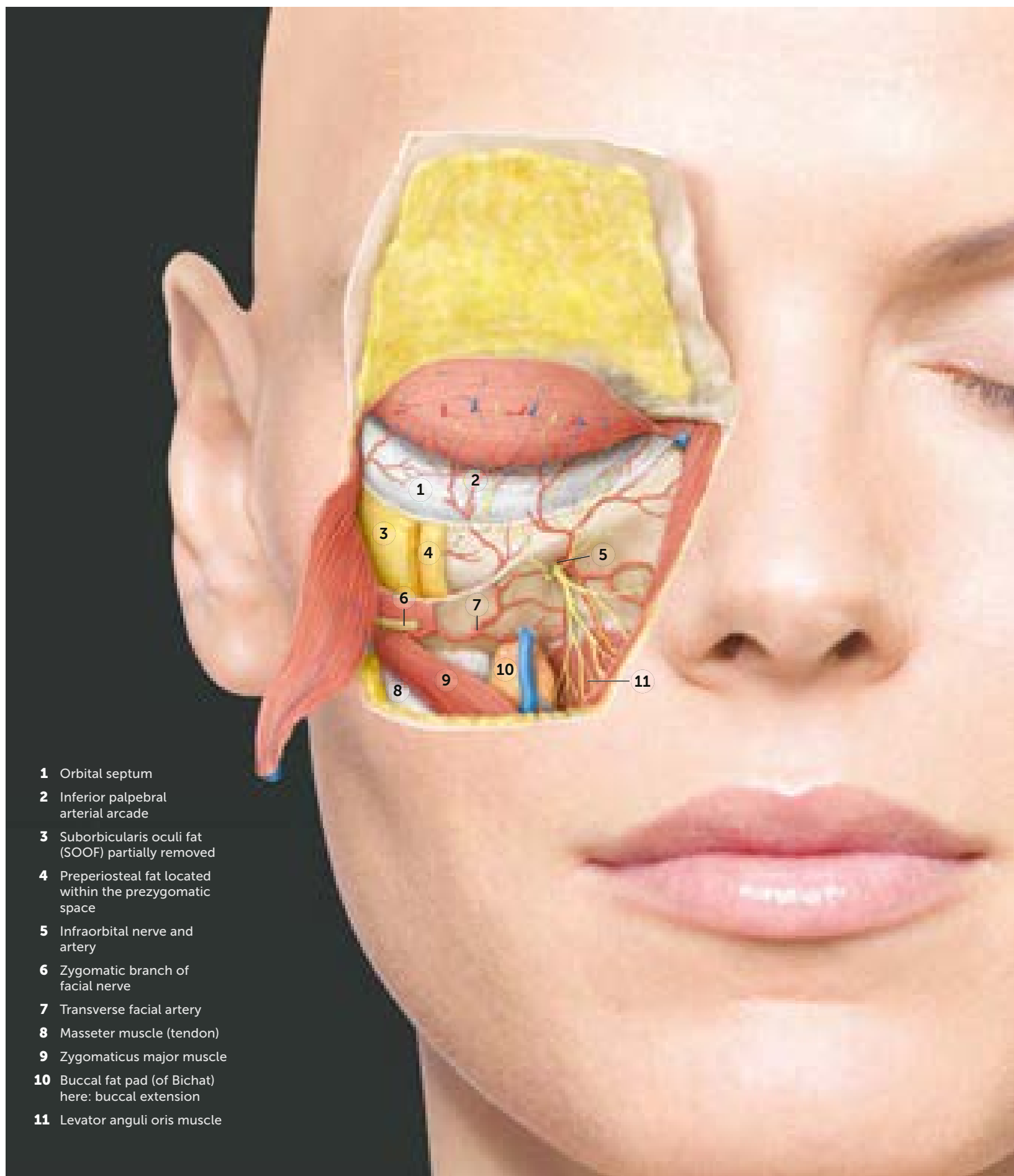
Chapter 5

Infraorbital



- 1 Superficial fatty layer
- 2 Sub-orbicularis fat (SOOF) partially removed
- 3 Preperiosteal fat located within the prezygomatic space
- 4 Deep lateral cheek fat compartment
- 5 Deep medial cheek fat compartment
- 6 Deep pyriform fat compartment located within the deep pyriform space
- 7 Tear trough ligament

9 Reflection of the skin, the superficial fatty layer, the orbicularis oculi muscle, the SOOF, and transsecting the zygomaticus minor and the levator labii superioris muscles, exposing the deep medial cheek fat compartment and the deep pyriform space.

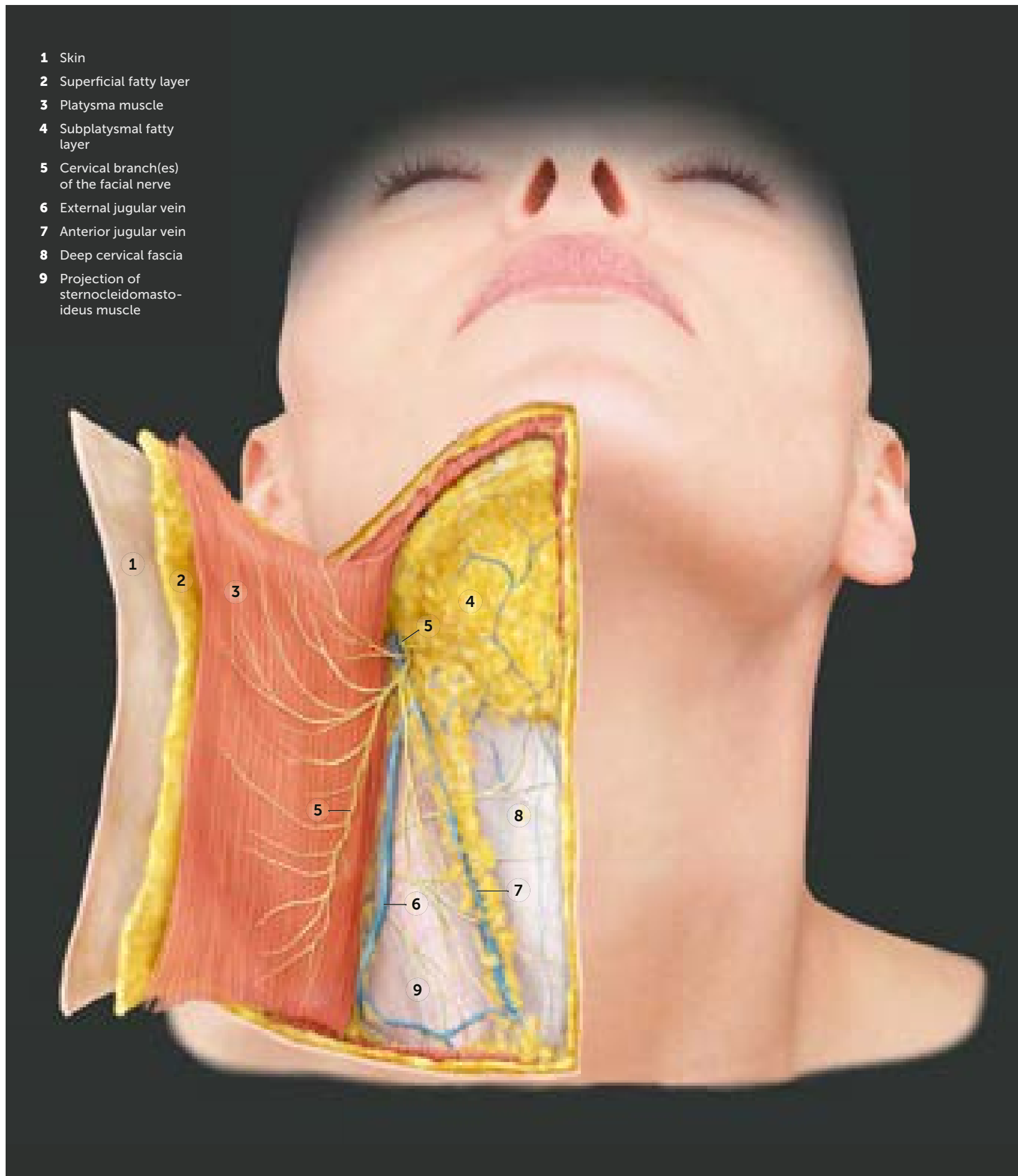


10 Reflection of the skin, the superficial fatty layer, the orbicularis oculi muscle, the levator labii superioris muscle, and all deep midfacial fat compartments, exposing the infraorbital neurovascular structures.

Chapter 12

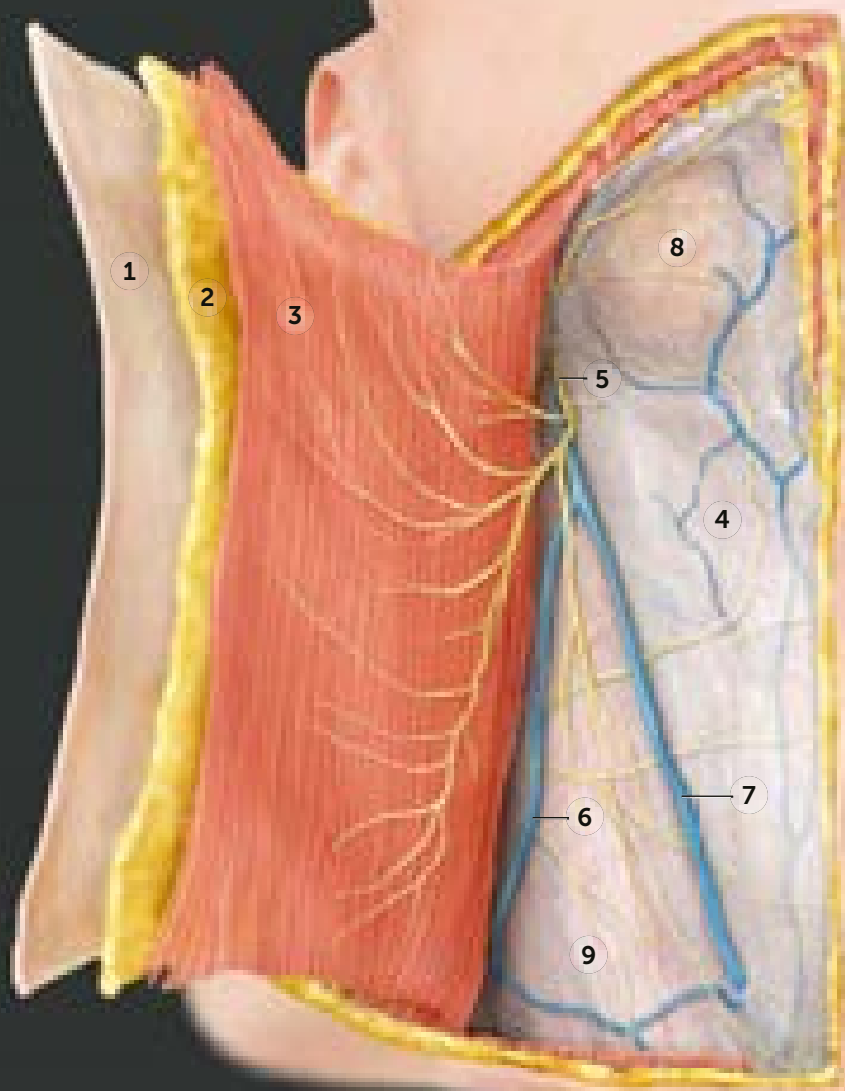
Neck

- 1 Skin
- 2 Superficial fatty layer
- 3 Platysma muscle
- 4 Subplatysmal fatty layer
- 5 Cervical branch(es) of the facial nerve
- 6 External jugular vein
- 7 Anterior jugular vein
- 8 Deep cervical fascia
- 9 Projection of sternocleidomastoid muscle



5 Reflection of the skin, the superficial fatty layer, and of the platysma muscle, exposing the subplatysmal fatty layer.

- 1 Skin
- 2 Superficial fatty layer
- 3 Platysma muscle
- 4 Deep cervical fascia
- 5 Cervical branch(es) of the facial nerve
- 6 External jugular vein
- 7 Anterior jugular vein
- 8 Projection of the submandibular gland
- 9 Projection of the sternocleidomastoid muscle



6 Reflection of the skin, the superficial fatty layer, the platysma muscle, and removal of the subplatysmal fatty layer, exposing the deep cervical fascia.

Chapter 13

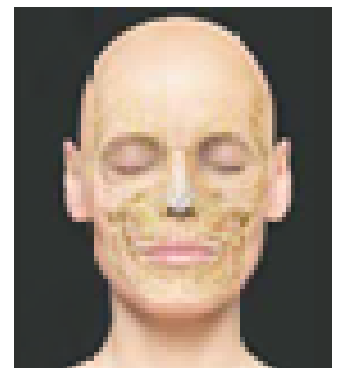
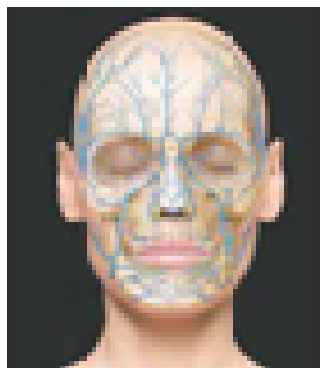
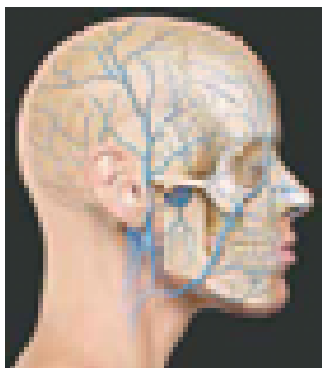
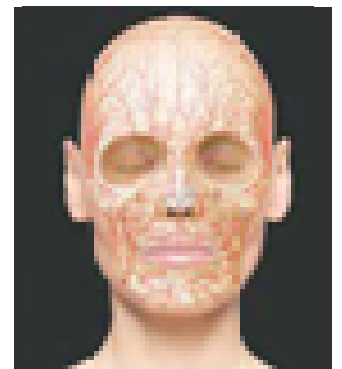
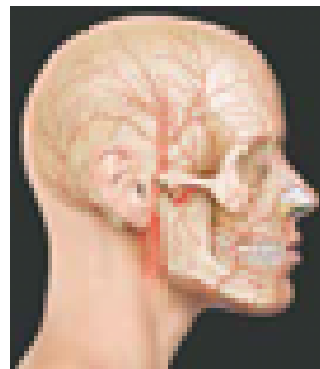
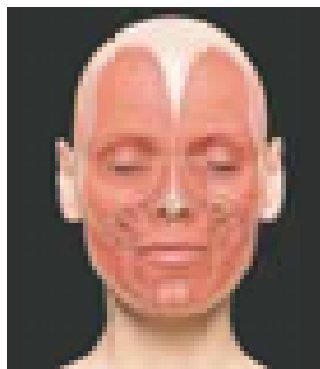
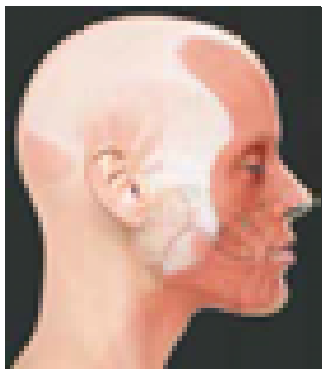
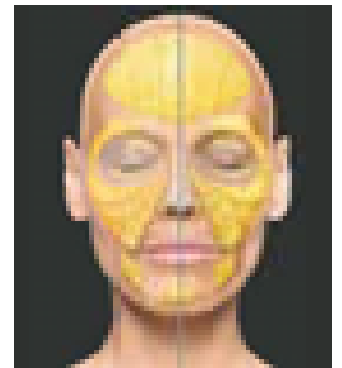
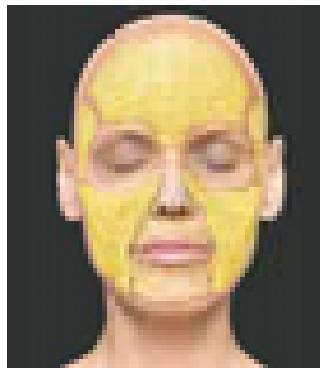
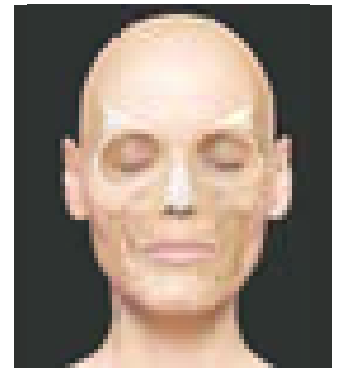
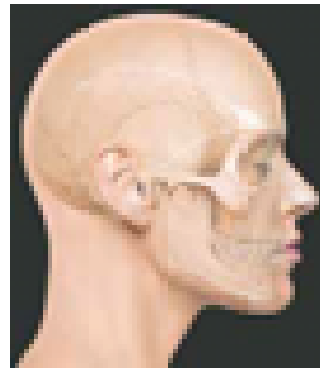
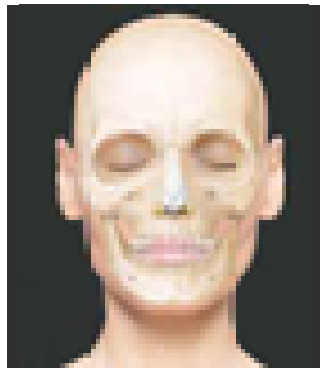
Overview

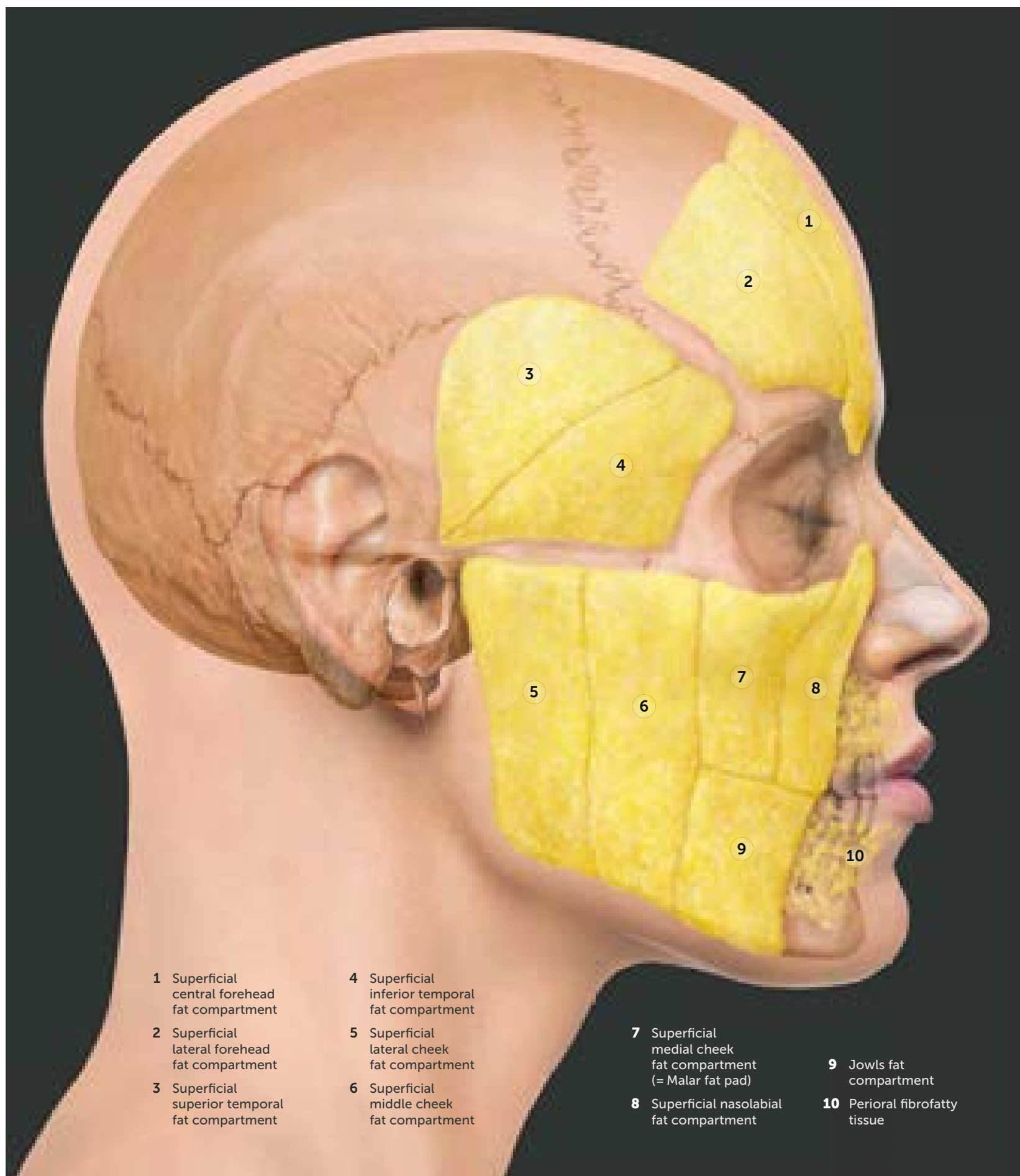
Overview: Anatomic systems of the face

The face is composed of a bony platform which includes the various facial bones. The overlying soft tissues are connected to the bony platform via facial ligaments which expand in some cases all the way to the dermal undersurface. Additionally, facial ligaments are incorporated into a 3-dimensional connective tissue system which includes facial muscles, provides guidance and protection for facial nerves, arteries and veins. This specific 3-dimensional fascial system allows also

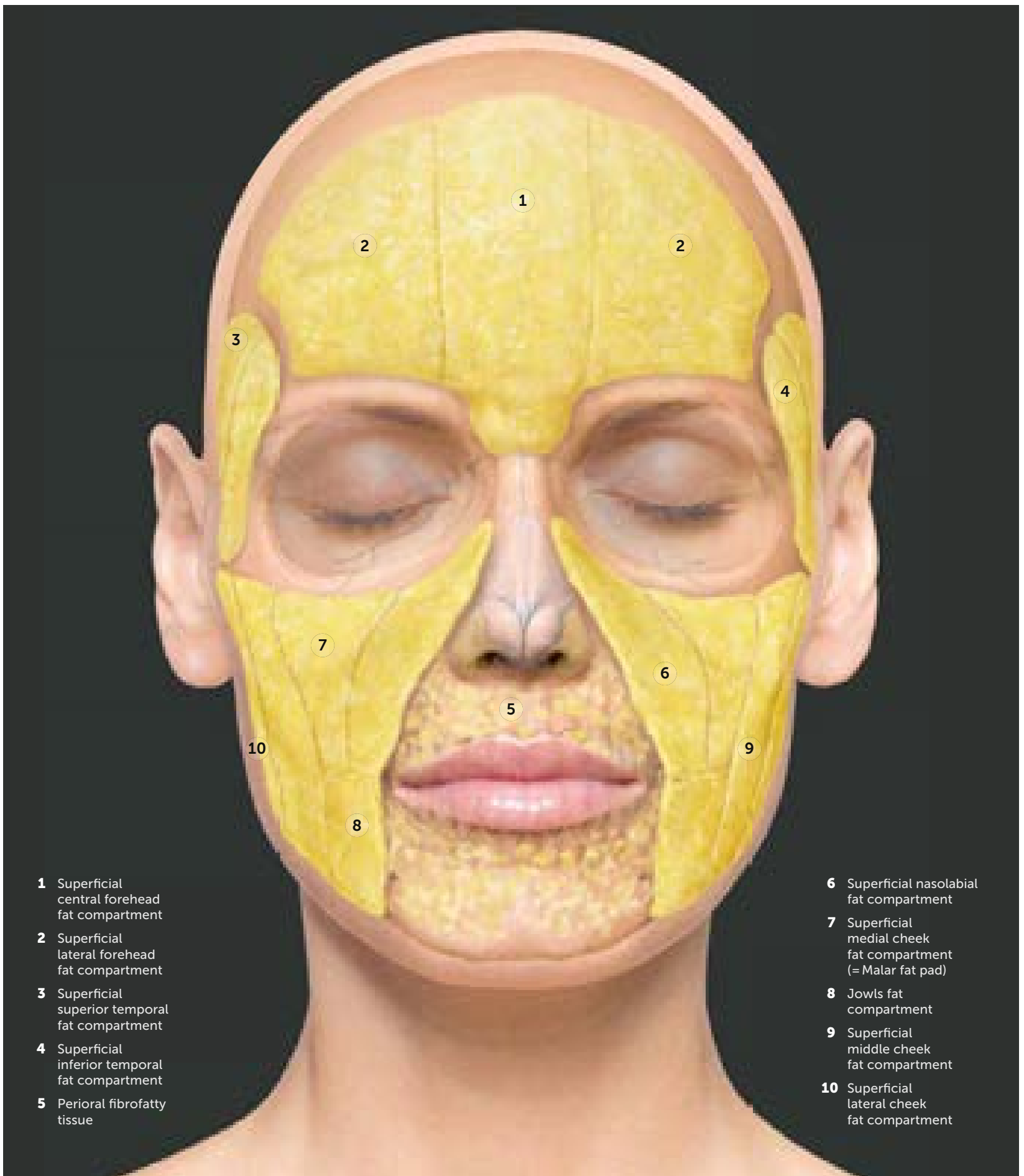
for the force transmission between muscles and skin which at the dermal undersurface is termed retinacula cutis.

In the following each anatomic system (bones, ligaments, fat, muscles, arteries, veins and nerves) is depicted individually despite all of them need to be viewed as an interlacing biomechanical and aesthetic concept.





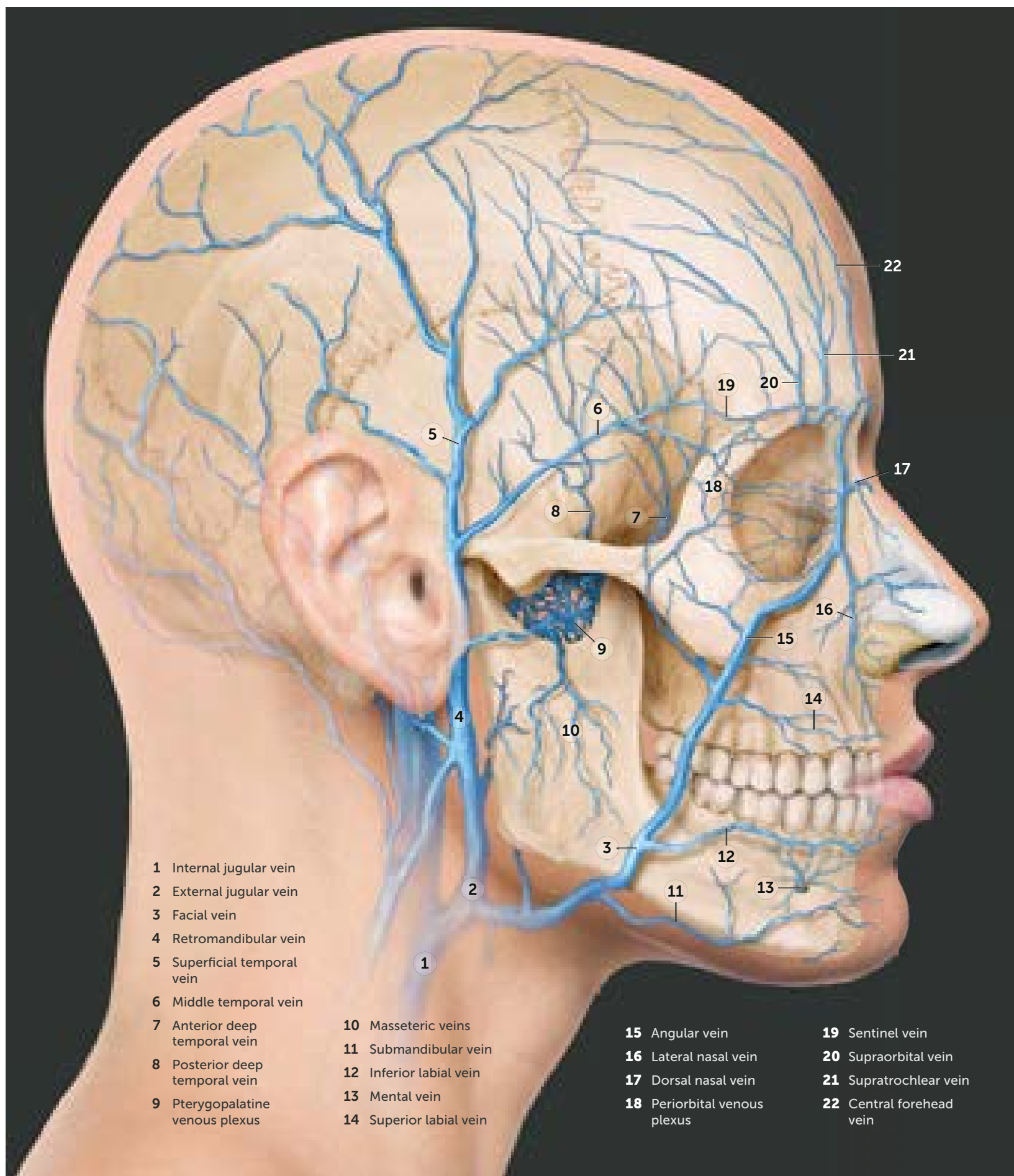
5 Superficial fat compartments of the face (lateral view).



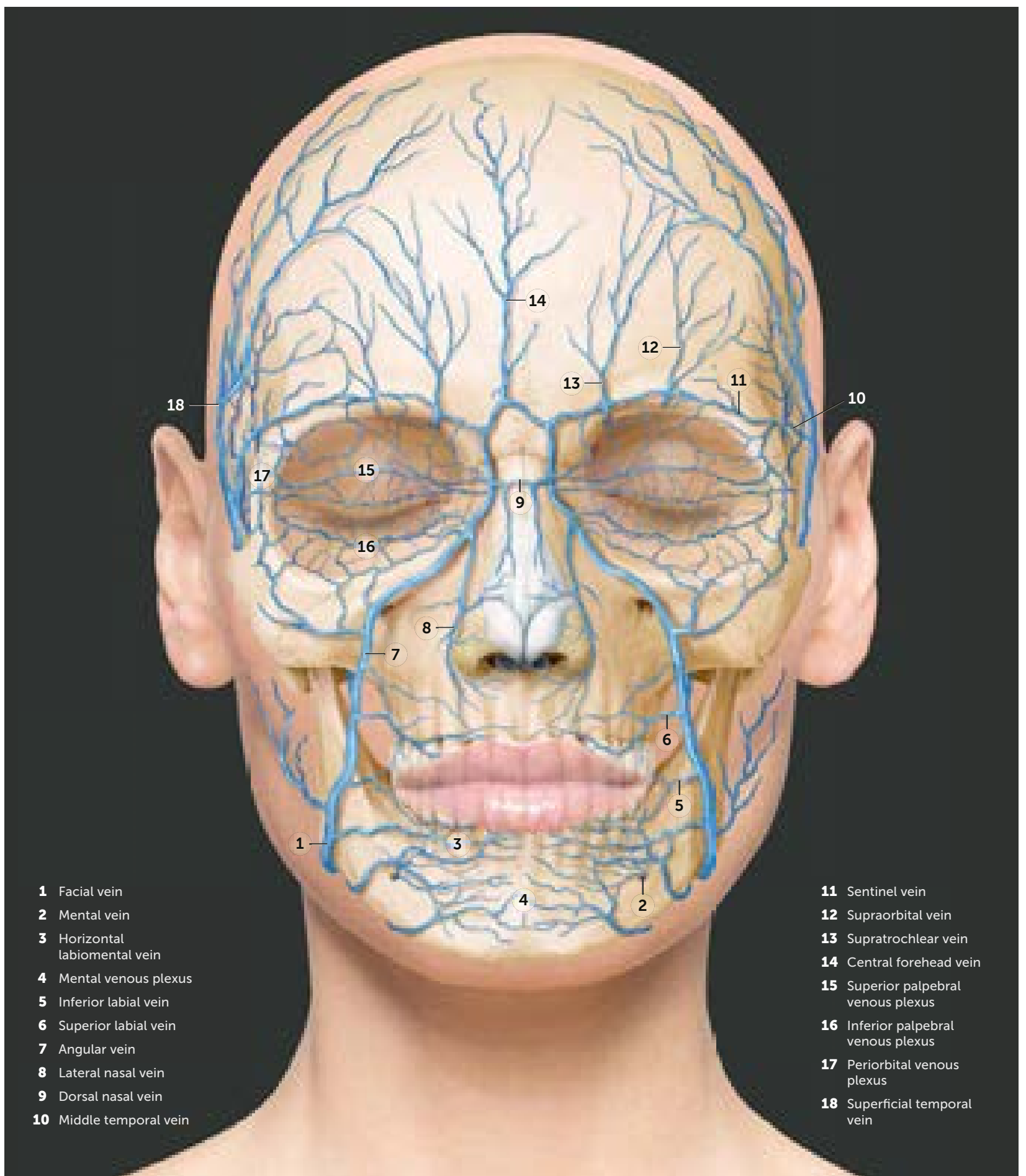
- 1 Superficial central forehead fat compartment
- 2 Superficial lateral forehead fat compartment
- 3 Superficial superior temporal fat compartment
- 4 Superficial inferior temporal fat compartment
- 5 Perioral fibrofatty tissue

- 6 Superficial nasolabial fat compartment
- 7 Superficial medial cheek fat compartment (= Malar fat pad)
- 8 Jowls fat compartment
- 9 Superficial middle cheek fat compartment
- 10 Superficial lateral cheek fat compartment

6 Superficial fat compartments of the face (frontal view).



13 Veins of the face (lateral view).



14 Veins of the face (frontal view).