

The anatomy of the surgical treatment of migraine

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Cadaver dissection and corresponding legend

Background:

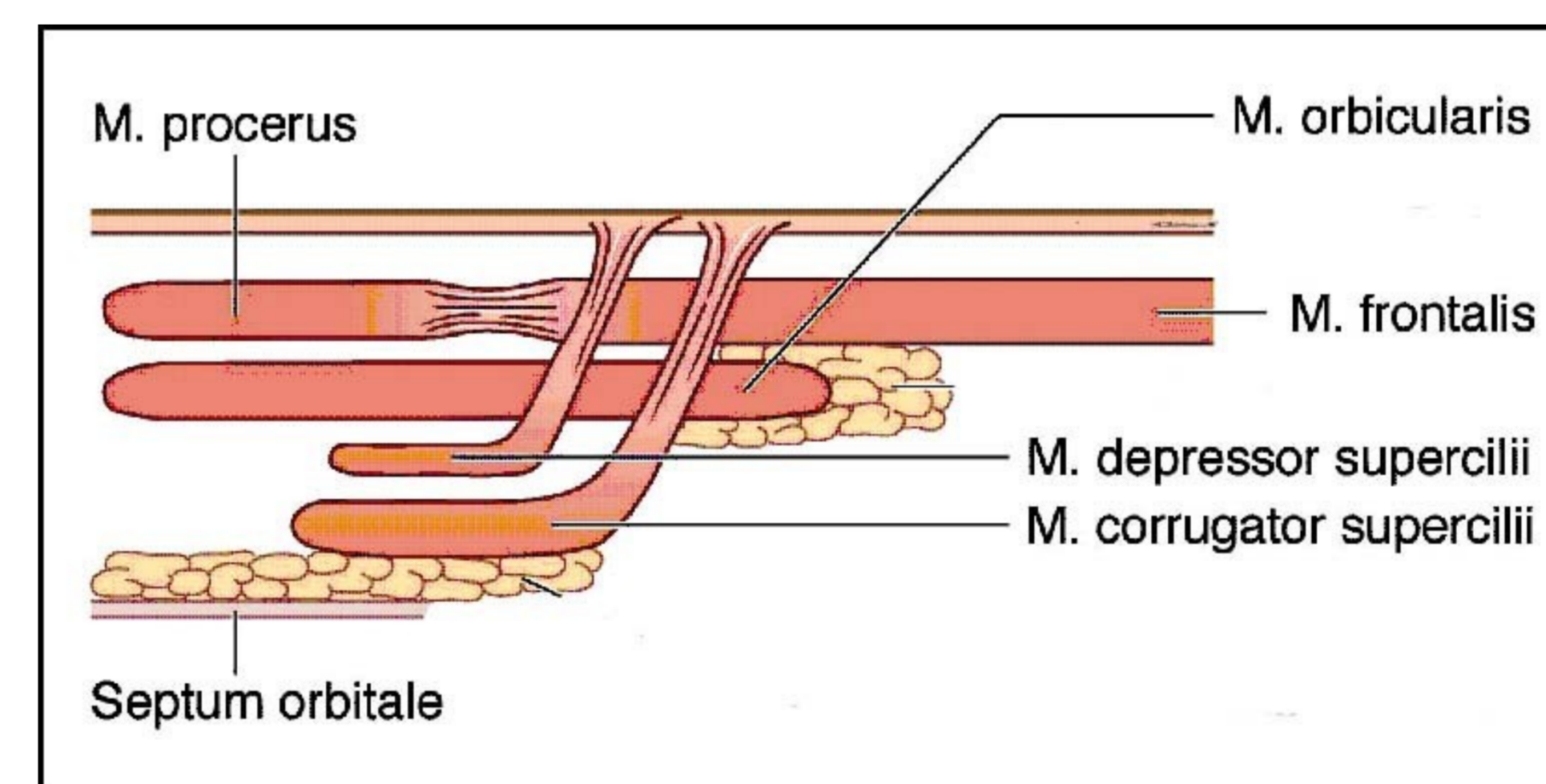
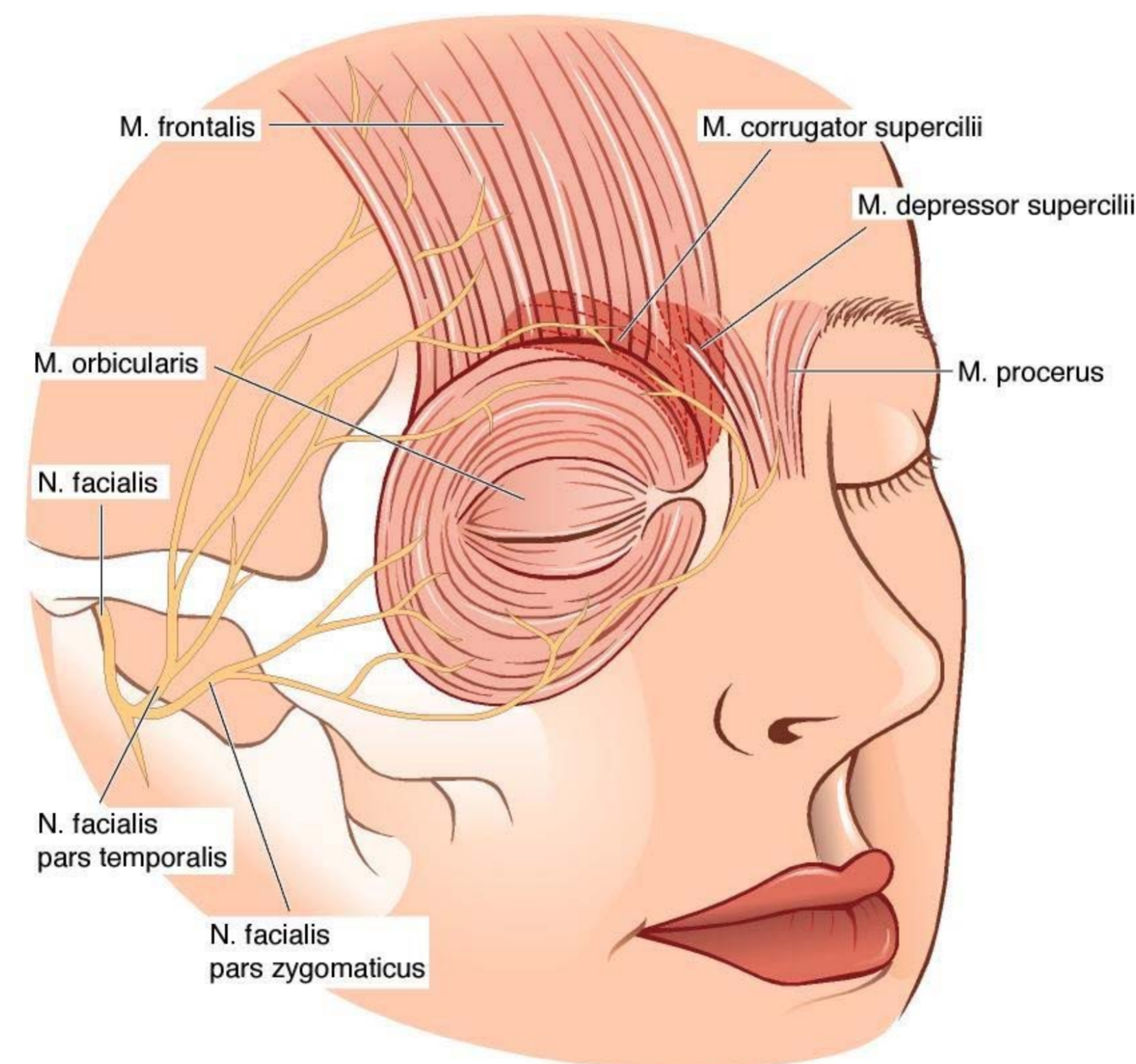
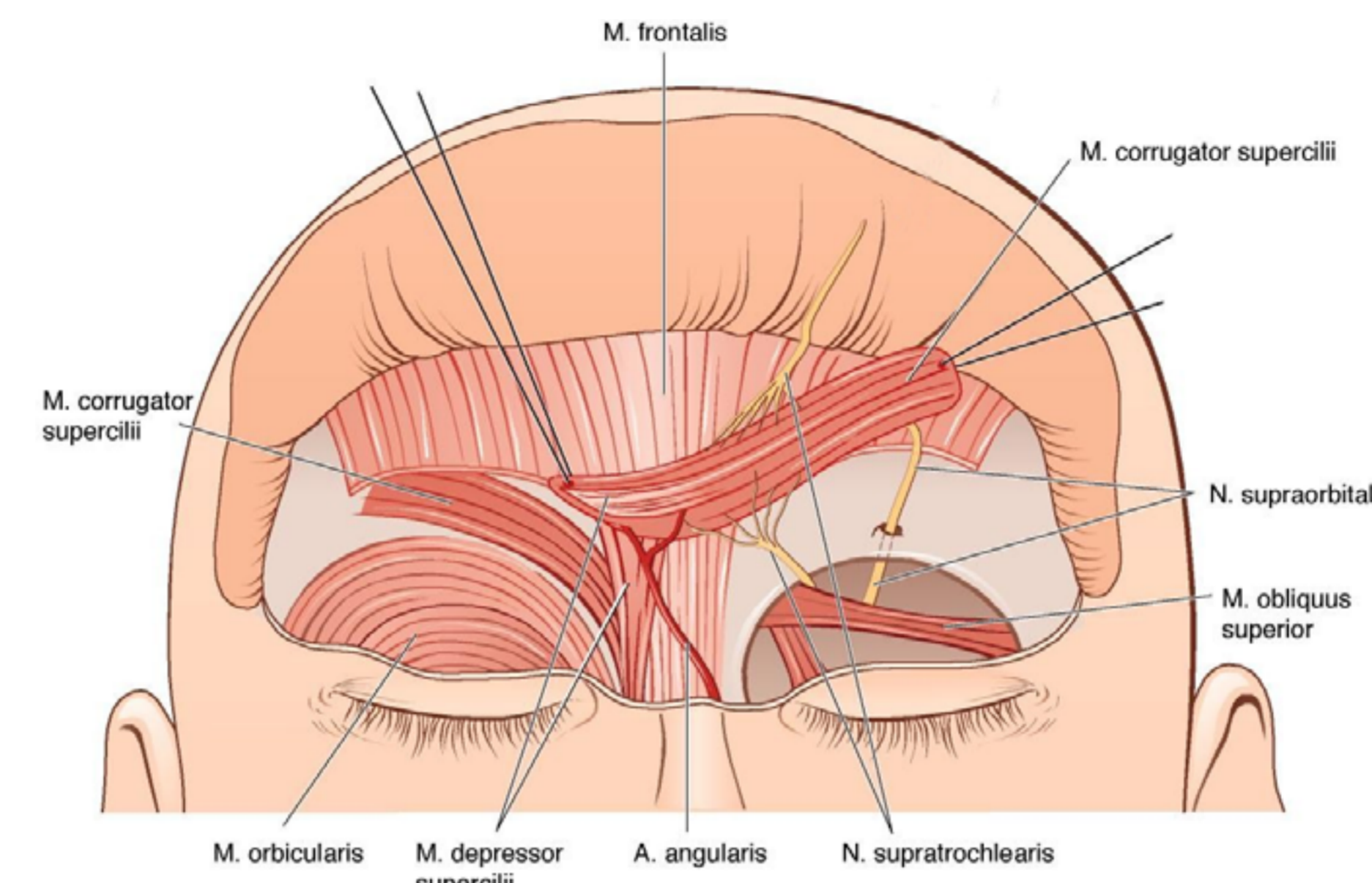
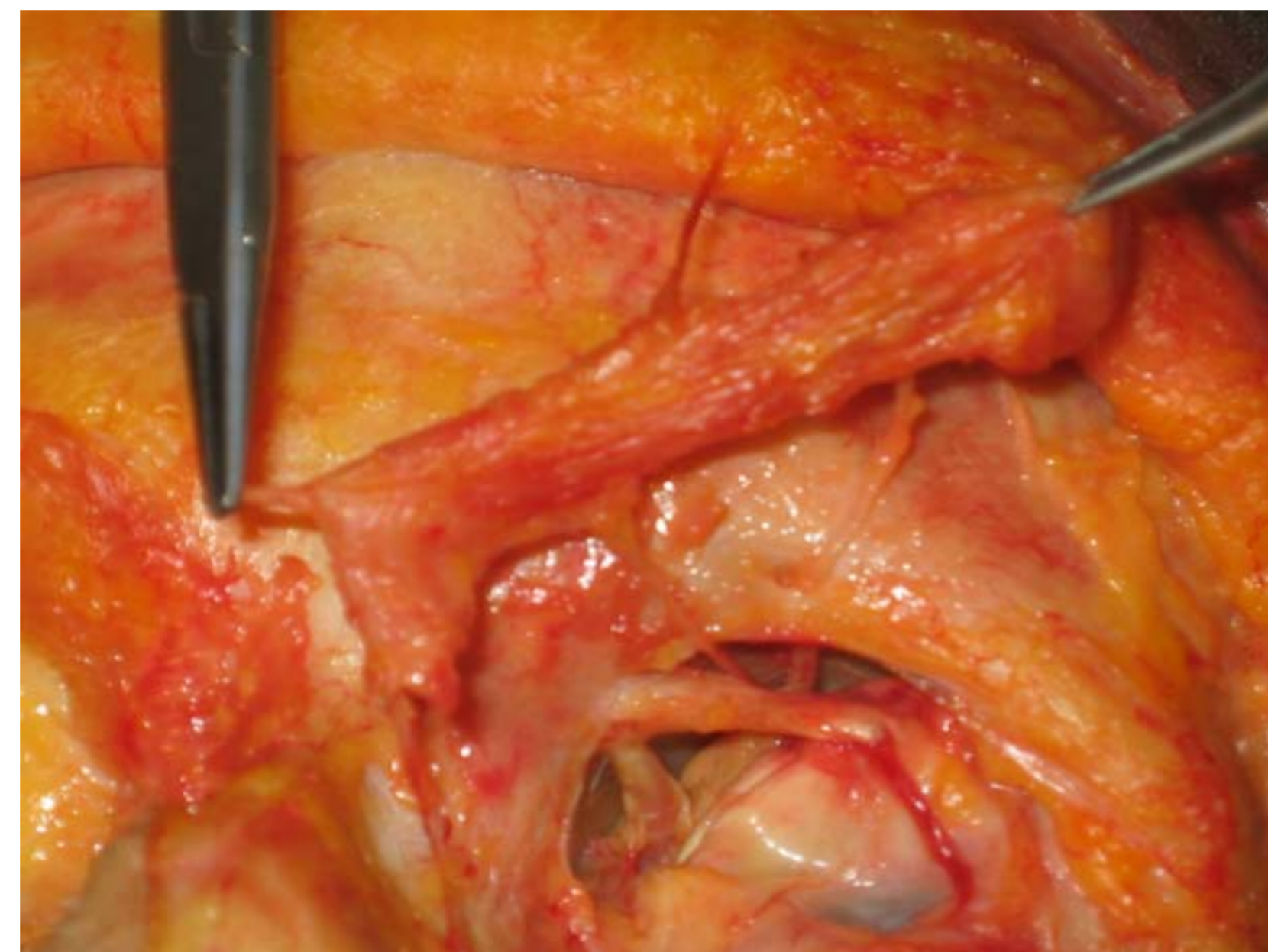
The transpalpebral resection of the corrugator and depressor supercilii muscles is a new treatment option for migraine headaches.

Hyperactive contractility of these muscles can provoke the peripheral compression of the supratrochlear nerve and induce a neurogenic inflammation triggering the symptoms of migraine

Nerve Supply:

Dual nerve supply through branches of the facial nerve.

medially-zygomatic VII
 laterally-temporal VII



Instant anatomy:

Mass and length of the corrugator are highly variable

- the corrugator is penetrated by the supratrochlear nerve and runs over the supra-orbital nerve
- the corrugator pierces the orbicularis and frontalis muscles separated by general fat pads to achieve extraordinary glabella mobility

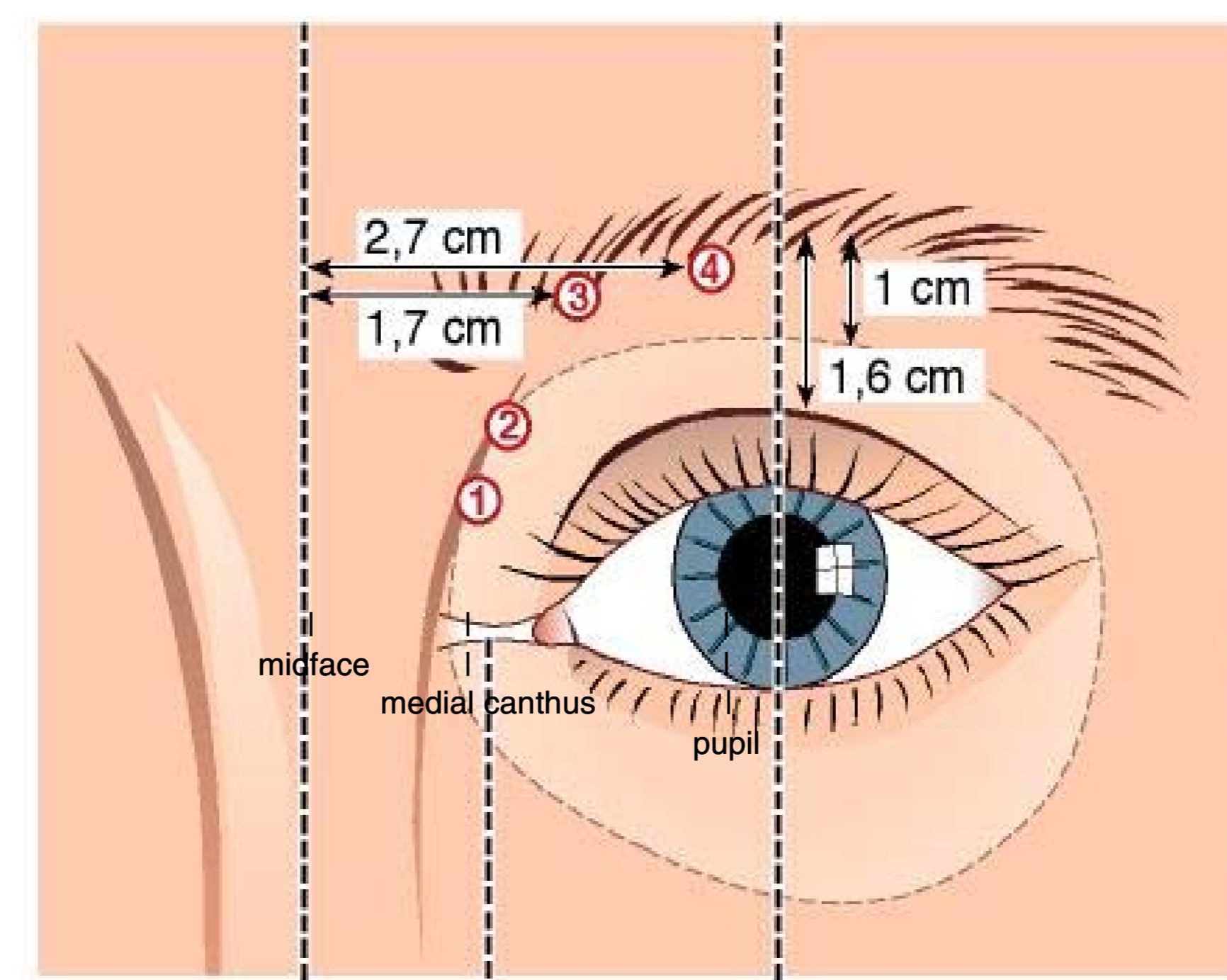
Anatomical layers:

3 paired muscles acting in the glabella region

- | | |
|-------------|----------------------------|
| Superficial | - procerus and frontalis |
| middle | - orbicularis |
| deep | - corrugator and depressor |



Corrugator with penetrating supratrochlear nerve



Measurement:

- ① Origin of the depressor supercilii; 1,0 cm above the medial canthus
- ② Origin of the corrugator supercilii; 1,4 cm above the medial canthus
- ③ Midface-supratrochlear nerve; 1,7 cm
- ④ Midface-supraorbital nerve; 2,7 cm