

Resource for Unit 4 Lesson 4 The Nasalis Muscle- Bunny Lines

Bunny Lines

Bunny lines are dynamic rhytids primarily forming due to contraction of the transverse fibres of the nasalis muscle on the nasal dorsum, with some contribution of the procerus muscle. They appear during facial animation (speaking, laughing, frowning). They may appear in patients following BoNT-A treatment to the glabellar region if the nasalis muscle is not treated simultaneously.

Nasalis:

Function: Each Nasalis muscle is comprised of two parts – compressor naris (transverse part) and medial/alar part (dilator naris posterior). It lies superficial to the nasal bone and lateral nasal cartilage, being covered only by the nasal skin. The transverse part compresses the nasal aperture, whilst the alar part dilates the nostrils it by pulling the ala laterally. Both functions are there to prevent the external nasal valve from collapsing on inspiration. It is the transverse part that causes Bunny Line formation.

Innervation: Buccal branch of **facial nerve**

Arterial supply: Infraorbital artery (from maxillary artery) and superior labial, septal and lateral nasal branches of **facial artery**.

Venous drainage: infraorbital vein and superior labial, septal and lateral nasal veins (tributaries of the facial vein)

Attachments: Laterally, the alar part of the muscle originates from the frontal process of the maxilla, superior to lateral incisor. The transverse part originates superolateral to incisive fossa. The alar part inserts medially into the skin of the ala, and the transverse part merges with its contralateral counterpart on the dorsum of the nose.

Several arteries and nerves course superficial to nasalis including, the facial artery terminal branches of the infraorbital artery and nerve, and the external nasal artery and nerve.

BoNT-A injections:

Treatment of bunny lines is performed with 2-3 injections (two lateral +/- one medial). The needle is inserted to one-third of its depth and injection is performed into the transverse part of the nasalis muscle. Important to direct the needle away from the lateral aspects of the muscle as this can cause lip ptosis by compromising the levator labii superioris alaeque nasi muscle.