

Nerves of the face considerations during minimally invasive procedure

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The nerves of the face can generally be divided into motor and sensory nerves. When considering facial aesthetic procedures, it is important to take into account the facial nerve as motor nerves and the trigeminal nerve as a sensory nerve. Firstly, the five branches of the facial nerves are already well-known. Each branch of the facial nerve innervates the facial expression muscles and emerges forward from the parotid gland. The branches of the facial nerve spread widely and diverge, making it important to predict their directionality in the face. However, it is even more crucial to anticipate the layer and depth through which they travel, rather than just their directionality. In order to distribute to each facial expression muscle, the branches of the facial nerve run forward from deep within the SMAS (Superficial Musculoaponeurotic System), where the facial muscles and fascia are continuous. All branches of the facial nerve run in the same plane in the face, but their depths from the skin surface vary due to the regional thickness of the subcutaneous tissue. In contrast to the facial nerve, the sensory nerves from the trigeminal nerve travel through all layers of the face, from bone to skin. Nevertheless, sensory nerves can be relatively safe during minimally invasive procedures because the main thick branches are located in the deep layer.