



## MACS-midface-lift is more effective than subperiostal mid-face-lift to correct the nasolabial fold during face-lift surgery

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**Background & Introduction:** The correction of the nasolabial fold plays an important role in the rejuvenating process of the face lift and especially in slim patients. The midface-lift adds volume to the zygomatic region by cranially repositioning soft tissue and can also correct the nasolabial fold. The procedure can be performed subperiostally (Tessier) or with the MACS-technique from Tonnard/Verpaetae. With the subperiostal method the inner layer of the midface is detached, imbricated and elevated in one block. With the MACS-method a small area of the SMAS is suspended cranially. We wanted to compare the effectivity of both methods in regard of this issue.

**Methods/Analysis:** A point in the midface is marked and its potential of elevation, i.e. the potential of correcting the nasolabial fold was analysed with both procedures. With the subperiostal lift, the maximum possible amount of elevation of this point was identical with the potential of elevation of its horizontally projected subperiostal counterpart, i.e. we can admit a nearly parallel elevation of both points. With the MACS-technique, the potential of elevation is only limited by the (cranially) range of motion of the point of fixation in the SMAS. Since the subcutaneous tissue of the midface, in contrast to the periost, is very mobile, this range of motion consists of an arc of rotation of some 90°-120°. The potential of elevation, therefore, is definitely higher with the MACS technique compared the subperiostal technique.

**Results:** From 2008 to 2018, we have performed 181 mid-face-lifts, 32 times subperiostally and 149 times with the MACS-technique. Follow up ranged from 21 months to 7 years. Regarding the correction of the nasolabial fold, the MACS technique showed to be more effective than the subperiostal technique.

**Discussion:** The subperiostal technique is more invasive than the MACS method and frequently causes discomfort to the patients like itching and dysaesthesia. Due to the imbrication, however, it adds more volume to the midface at the zygomatic region than the MACS method. The MACS technique, due to its superficial anchor at the plane of the SMAS, enables a wider range of motion and can correct more effectively the nasolabial fold.

**Conclusion:** If correction of the nasolabial fold has priority, the MACS technique showed to be distinctly superior. If a volumetric correction of the mid-face has priority, the subperiostal technique should be implemented.

**Biography:** Edvin Turkof graduated in 1982 as Doctor of Medicine and accomplished his residency at the Department of Plastic and Reconstructive Surgery, Vienna General Hospital (Head: Prof. H. Millesi). In 1997 he was appointed Associate Professor, and in the same year, he opened his private practice. Areas of expertise: Cosmetic Surgery, Surgery of the Peripheral Nerves, Breast Reconstructive Surgery and Microsurgery. Professor Turkof has authored numerous scientific publications and has led several projects at home and abroad.

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