Three Dimensional Midface Rejuvenation

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Background

Many facial rejuvenative procedures tighten tissue but this may flatten elastic soft tissue projection and, in some patients, create the stigma of surgical alteration. Recent trends toward “shadow filling” place injectable volume into the concavity of attenuated ligamental support without transfer of volume from dependent unsupported tissues. These strategies can create an unnaturally shaped face. Cheek augmentation is permanent and can sculpt a measured stable natural Ogee curve of youth and happiness. Implant placement should be considered a mid-facelift; volume is transferred to grooves from unsupported folds over spaces following the release of attenuated ligaments.

Methods and Materials

An implantable midface shell was modified to fit individual facial skeletal requirements. . A silicone template transferred facial dimensions to the porous polyethylene implant which was carved and bent as needed prior to subperiosteal insertion via a subciliary incision. Repositioned and lifted soft tissues were sutured to the screw lag implant fixation..

Experience

Fifty consecutive patients in whom cheek implantation was used in concert with peri-orbital rejuvenation are presented. The procedures were analyzed as to indication, technique, results, and complications. At one year the results were analyzed by a panel of surgeons. One implant was modified by shave under local anesthesia due to asymmetry of lateral projection. No implants were removed: there were no infections, hematomas, long term sensory or motor nerve dysfunction, or eyelid malposition.

Results

By retrospective analysis we defined four indications for the procedure. The most common was pre-existing horizontal maxillary-zygomatic retrusion with shallow orbit unmasked by age- induced soft tissue descent of the cheek. The second group presented with normal facial skeletal growth but suffered from severe attenuation of soft tissues due to age, muscle wasting, and in one case Parry-Romberg Syndrome lipoatrophy. The third group of patients was altered by aggressive surgical stretch procedures and injudicious use of facial liposuction. The last group all were males who initially recognized their turkey neck as an indication for surgery but became aware of the role of hemiexopthalmos creating an aged appearance. An algorithm is presented identify and treat each group.

Conclusions

This study shows that midface augmentation improves outcomes in properly selected patients with identifiable preoperative facial shape patterns.