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Analysis of Cervical Angle in the Submental Muscular Medialization and Suspension Procedure

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IMPORTANCE The submental muscular medialization and suspension (SMMS) procedure is an option for addressing an obtuse cervical angle in select patients vs the use of traditional rhytidectomy techniques.

OBJECTIVE To compare the change in position of the cervical point between groups undergoing SMMS vs the traditional rhytidectomy technique.

DESIGN, SETTING, AND PARTICIPANTS A retrospective review was performed of 141 patients undergoing rhytidectomy in an accredited private surgery center between January 1, 2013, and December 31, 2014, comparing cervical point depth between patients undergoing SMMS vs those undergoing traditional rhytidectomy with platysma plication. Statistical analysis was performed from November 11, 2017, to January 5, 2018.

INTERVENTIONS Patients underwent either SMMS or traditional rhytidectomy with platysma plication.

MAIN OUTCOMES AND MEASURES The primary end point was change in the cervical point distance between preoperative and postoperative standardized profile photos.

RESULTS A total of 141 patients were included in the analysis. A cohort of 46 patients (43 women and 3 men; mean age, 63.5 years [range, 49.0-79.0 years]) underwent neck contouring with the SMMS technique and a cohort of 95 patients (90 women and 5 men; mean age, 61.0 years [range, 48.0-73.0 years]) underwent traditional rhytidectomy with platysmaplasty. The cervical point distance of the SMMS cohort had a mean (SD) postoperative increase of 2.0 (1.05) cm (95% CI, 1.73-2.28; $P < .001$) compared with 0.78 (0.82) cm in the traditional rhytidectomy cohort (95% CI, 0.54-1.02; $P < .001$).

CONCLUSIONS AND RELEVANCE The results of this study suggest that submental muscular medialization and suspension appears to be an effective option to address the obtuse neck in select patients.

LEVEL OF EVIDENCE 3.

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