Background: Fat grafting can be used to improve results of facelifting. The extent to which plastic surgeons use fat grafting in their facelift practice is unknown. The goals of this study were to understand the current utilization of fat grafting during facial rejuvenation surgery and identify the most common techniques used.

Methods: A 28-item questionnaire was formulated for distribution to a randomized cohort of American Society of Plastic Surgeons (ASPS) members. Data was collected and statistically analyzed using Pearson chi-squared and Fisher's exact tests.

Results: A total of 309 questionnaires were collected. The questionnaire revealed that 85.2% of respondents utilize fat grafting during facelifts. Currently the most common techniques employed include abdominal harvest, centrifuge processing, blunt cannula injection without pre-tunneling, and placing less than 0.1cc per pass. The deep central malar, lower lid cheek junction, and nasolabial folds are the most commonly injected areas.

Conclusion: Combining surgical repositioning of fat with fat grafting offers surgeons a greater degree of aesthetic control for correcting contour in the aging face. While there is controversy regarding the best method to surgically reposition fat, there is a growing consensus that volume augmentation is preferred by most facelift surgeons.

Figure 1. A 54 year old female seen prior to and following an extended SMAS face lift. 3ccs of autologous fat were injected into the central deep compartment and 2ccs of autologous fat were injected into lateral aspect of the deep compartment. Note the blending between the lower eyelid, anterior cheek, and lateral cheek, as superficial fat repositioning is combined with deep compartment augmentation.



