

Title: Successful Treatment of Cosmetic and Functional Deficits Secondary to Metastatic Squamous Cell Carcinoma with Poly-L-Lactic-Acid Dermal Filler

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Introduction: Injectable dermal fillers have become a popular and well established treatment for fine lines, wrinkles, volume loss, skin sagging, and loss of collagen associated with aging. While fillers are commonly marketed as elective, purely cosmetic luxury treatments, they can also be extremely effective in the treatment of volume loss secondary to medical conditions or iatrogenic etiologies.

Case: An 83-year-old male presented to Aesthetics Clinic for evaluation and treatment of left facial volume loss. He reported development of the defect secondary to parotidectomy and radiation therapy for metastatic squamous cell carcinoma of the parotid gland, followed by ipsilateral modified radical neck dissection thirteen years prior. Patient was dissatisfied with the cosmetic asymmetry in his face, and also had functional concerns due to the effects of the volume asymmetry on his lips. Given the left sided volume deficit, patient reported frequent trauma to the right lower lip when eating and chewing.

Treatment: After cleansing the area with alcohol, 0.1 cc of 1% lidocaine with epinephrine was injected superficially at the left angle of the mandible, followed by the creation of a single entry point with an 18 gauge needle. 9 cc of poly-l-lactic-acid dermal filler (1 vial diluted with 10 cc sterile water, 1 cc lidocaine with epinephrine) was placed into the left cheek via a fanning technique with a cannula. He tolerated the procedure well without complication. Patient returned for follow up in 6 weeks, reporting high satisfaction and excellent cosmetic and functional improvement.

Conclusion: Poly-l-lactic-acid (PLLA) dermal filler is an FDA approved biostimulatory injectible which not only revolumizes tissue, but also helps to stimulate natural collagen production to produce longer lasting results. Here, we present a case of facial volume loss secondary to extensive surgery and radiation therapy which was successfully treated with PLLA. After just one minimally invasive, easy to tolerate treatment, our patient reported significant functional and cosmetic improvement. This case highlights the utility of PLLA, and dermal fillers in general, beyond the box of purely cosmetic dermatology.