

Novel Uses for Hydroxylapatite (Radiesse®) Filler: Beyond the Facial Folds

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Radiesse® has proven to be a reliable semipermanent dermal filler for over a decade. We have also found benefits for cheek-chin-jawline augmentation, facial hollows, traumatic osseocutaneous defects, and anophthalmic enophthalmos. These other indications may require significant volume to achieve the desired results. As with standard dermal filling for facial lines, we advocate lidocaine hydrochloride anesthetic dilution (about 0.33 cc for a full 1.5 cc syringe of Radiesse®) and use of a blunt-tip cannula (Fig. 151.1) to avoid intravascular injection that could cause necrosis or visual complications, which has been reported for multiple dermal fillers and autologous fat injections (Kim et al. 2011; Lazzeri et al. 2012). Facial skin injection sites should be cleaned with alcohol wipes and betadine to minimize infection of this semipermanent filler.

Areas of facial hollowing are well suited to Radiesse® injections (Figs. 151.1, 151.2, and 151.3). Typically a fanlike grid injection pattern is optimal



Fig. 151.1 27-gauge blunt-tip cannula that may be used for dermal filler injections to minimize the risk of intravascular injection

for filling areas of soft tissue atrophy. Depending on the treatment area and depth of defect, multiple 1.5 cc syringes may be necessary. When used for cheek-chin-jawline augmentation, it is placed supraperiosteally and seems to last even longer when placed in these deeper locations.

Placement at the zygoma just inferolateral to the eyes provides a pleasing albeit subtle midface elevation. Typically a bolus of 0.1–0.3 cc is placed supraperiosteally and then can be digitally molded to the desired effect.

Radiesse® osteoplasty to fill and mask traumatic bony defects is also a procedure with high patient acceptance (Fig. 151.4) (Vagefi et al. 2008).

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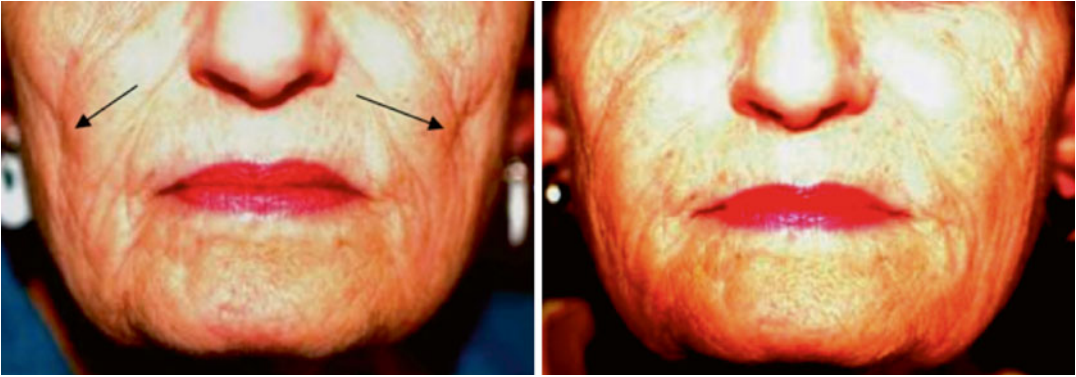


Fig. 151.2 Before and after Radiesse® injection to improve age-related cheek hollowing. The arrows shows the areas of hollowness prior to Radiesse® injection



Fig. 151.3 Before and after Radiesse® to improve HIV-related lipoatrophy



Fig. 151.4 Before and after Radiesse® applied as an osteoplasty agent

This has been found particularly helpful for frontal bone defects. Additionally, some patients benefit from a “filler rhinoplasty” to improve overly prominent nasal dorsum concerns. There has been a report of vision loss following hyaluronic acid dermal filler injection for this purpose, so

physicians are advised to strongly consider blunt cannulas for injection (Kim et al. 2011).

Anophthalmic enophthalmos corrections generally achieve approximately 2 mm of correction per 1 cc of hydroxylapatite injected. Patients who have had multiple prior orbital surgeries should



Fig. 151.5 Before and after Radiesse® applied for right-sided anophthalmos-related enophthalmos and superior sulcus deformities

be warned of potential anterior migration and potential severe eyelid edema if overly aggressive filling is attempted too quickly (Vagefi et al. 2007, 2011). These patients are likely better served by serial treatments over time rather than multiple syringes during a single treatment. Figure 151.5 shows a sample of anophthalmos patient that benefited from Radiesse® injection to the right orbit to improve enophthalmos and superior sulcus deformity.

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