

The Need for Consensus Recommendations on the Use of Injectable Poly-L-Lactic Acid for Facial and Nonfacial Volumization

The primary reason patients seek aesthetic treatment from dermatologists or plastic surgeons is to combat the signs of aging.¹ Increased interest in this goal has been driven by the development of newer treatment options that help restore a more youthful visage, as well as the increasing societal emphasis on the value of an appearance that conveys youth, vitality, and fecundity.^{2,3}

An enhanced understanding of the dynamic anatomical and physiological changes associated with the aging face has, in turn, allowed a more sophisticated appreciation of the interdependent nature of such changes and how they work in concert to affect overall facial aesthetics.⁴ As our knowledge and experience have grown, it has become possible to more specifically tailor treatment approaches to the individual needs of each patient.

Soft tissue augmentation is one important option in aesthetic enhancement, and it continues to grow in popularity for a number of reasons. These include practical considerations such as its minimally invasive nature⁵ and its ability to directly nullify volume loss, which is now appreciated as a key root cause of the declining aesthetics associated with facial aging.⁴

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Agents that replace collagen are effective tools for addressing volume loss.² Among these, poly-L-lactic acid (PLLA) carries great potential as a cosmetic treatment. Poly-L-lactic acid is a stimulator of host collagen synthesis; this neocollagenesis acts to volumize soft tissue in a gradual, progressive, and predictable manner.⁴ The patient photographs found in the “Facial Volumization with PLLA: Representative Results” portion of the “Consensus Recommendations on the Use of Injectable Poly-L-Lactic Acid for Facial and Nonfacial Volumization” section of this supplement⁶ demonstrate the ability of PLLA to provide natural-looking restoration of lost facial volume.

Despite the considerable value conveyed by its mechanism of action, the full clinical potential of PLLA was not initially realized, as its use was associated with the frequent occurrence of adverse events, such as nodules and papules.⁷⁻¹¹ These results were due, in

large part, to inadequate recommendations regarding the methodology of PLLA use¹² and patient selection, and a somewhat common misunderstanding of the clinical implications of its underlying mechanism. However, our understanding of the use of injectables, including PLLA, for cosmetic enhancement is in a continual state of evolution and refinement. Considerable time has passed since the introduction of PLLA for soft tissue augmentation, and the collective experience of innumerable clinicians and investigators now forms a requisite knowledge base that can better inform its appropriate clinical utilization.

An international group of experts, each with more than a decade of experience in the use of PLLA, was convened in 2013 to discuss the evolving literature on PLLA, share their personal experiences and perspectives, and synthesize consensus recommendations on the appropriate use of PLLA for soft tissue augmentation.⁶ The objective of these recommendations is to enhance the use of this agent in order to decrease adverse events and improve patient outcomes.

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