

Thesis Title	The Efficacy of Injectable Polydioxanone for Periorbital Rejuvenation
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ABSTRACT

Periorbital rejuvenation is a common aesthetic concern among individuals seeking to address signs of aging around the eyes. People have been seeking various kinds of treatment modalities in order to obtain a more youthful appearance. Treatments are attempted from topical applications to varieties of procedures ranging from chemical peeling, topical retinoids and eye creams, botulinum toxin and collagen injection, dermabrasion and laser resurfacing to more invasive techniques such as using threads and plastic surgeries. Polydioxanone (PDO) filler has emerged as an innovative and effective solution in the field of non-surgical facial rejuvenation.

Polydioxanone filler, originally developed for surgical purposes, has gained popularity in the aesthetic industry due to its biocompatibility and biodegradability. The absorbable nature of PDO filler minimizes the risk of adverse reactions, making it a safe option for periorbital rejuvenation. The versatility of PDO filler allows it to address a wide range of concerns, including volume loss, fine lines, and wrinkles around the eyes. Studies have shown that Polydioxanone has outstanding efficacy in stimulating collagen production and has been proven to be more effective than Poly-L-Lactic Acid (PLLA) in inducing collagen formation. Clinical studies have demonstrated the effectiveness of PDO filler in improving periorbital aesthetics, with results lasting up to 6-12 months. The minimally invasive nature of the procedure and the absence of downtime make it an attractive choice for patients seeking quick and natural-looking results. Thus, the use of Polydioxanone filler for periorbital rejuvenation presents a promising non-surgical option for individuals looking to enhance the youthful appearance of their eye area. Its safety, versatility, and effectiveness make it a valuable

tool in the armamentarium of aesthetic practitioners, contributing to patient satisfaction and improved self-confidence.

The purpose of this research taking into consideration of the above studies is to study the efficacy of injectable Polydioxanone for periorbital rejuvenation along with the assessment of safety and side effects of the treatment. There will be a new alternative treatment for periorbital rejuvenation if it is found to be effective. Total of 23 healthy volunteers aged between 35-60 years old who met the criteria will be injected with polydioxanone filler 2 times, 4 weeks apart. For the assessment of the efficacy of injectable polydioxanone in the periorbital area is measured by Cutometer, Tewameter and the photography with hVISIA® Complexion Analysis System are compared at Week 0, 4th, 8th and 12th weeks. Physician will assess to detect any side effects and questionnaires are given out to evaluate patients' satisfaction.

Keywords: Periorbital Rejuvenation, Polydioxanone (PDO), Wrinkle Reduction, Skin Elasticity, Minimally Invasive Aesthetics, Collagen Stimulation

