

ABSTRACT

A REGENERATIVE MODALITY FOR THE THE TREATMENT OF NASOLABIAL FOLD: A MINIMALLY INVASIVE LIFTING TECNQUE

Boonyarat Mahatchariyatheera¹, M.D.; Punyaphat Sirithanabadeekul¹, M.D.; Atchima Suwanachinda², M.D., Ph.D.

¹*Division of Dermatology, Chulabhorn International College of Medicine, Thammasat University, Rangsit Campus, Klong Luang, Pathum Thani, Thailand*

²*Department of Dermatology, School of Anti Aging and Regenerative Medicine, Mae Fah Luang University, Bangkok, Thailand*

Background: Facial aging is a multifactorial process causing wrinkles and skin laxity. Polynucleotides (PN) are novel biostimulators that promote skin regeneration by enhancing collagen and elastin synthesis, representing a new approach for minimally invasive facial rejuvenation.

Aim: This study conducted a preliminary evaluation of the clinical efficacy and safety of polynucleotide injections, administered via a temporal approach, as a method for non-surgical facial lifting in individuals with moderate facial laxity.

Methods: A prospective pilot study was conducted on 12 participants (24 treated sides) with moderate facial laxity. Each received three monthly treatments of a 2% PN injectable gel (Rejuran S) administered to each temporal region using a cannula technique. Efficacy was objectively measured by the change in nasolabial fold (NLF) depth from baseline using a 3D imaging system (Antera 3D™) at assessments up to week 20. Safety was monitored throughout.

Results: The treatment yielded statistically significant and progressive reductions in the mean depth of the NLFs at all follow-up time points compared to baseline ($p \leq 0.001$). The procedure was well-tolerated, and no serious adverse events were reported.

Conclusions: This study provides strong preliminary evidence that polynucleotide injection via this temporal approach is an effective and safe treatment for facial lifting. The technique demonstrated clinically and statistically significant improvements in nasolabial folds and represents a promising new option for non-surgical facial rejuvenation.

Keywords: Polynucleotides, Nasolabial Folds, Facelift, Rejuvenation