

Peer Review

Review of: "Evaluation of Ozonized Fibrin-Rich Plasma as a Therapy for Facial Rejuvenation: A Clinical Case Study"

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Congratulations on presenting a timely and well-documented case series exploring the use of ozonized injectable fibrin-rich plasma (I-PRF) for facial rejuvenation. The manuscript addresses an important niche in aesthetic medicine by combining two regenerative therapies; ozone therapy and I-PRF, which are gaining prominence as minimally invasive alternatives to conventional aesthetic procedures. The authors have provided a comprehensive clinical workflow, including detailed descriptions of patient selection, treatment protocol, and follow-up assessments, which enhance the replicability of the procedure for other practitioners.

One of the major strengths of this manuscript lies in its methodological clarity. The step-by-step procedural details, including blood processing, ozonation techniques, and application areas, are well-described and supported by visual documentation. Additionally, the discussion section effectively integrates findings from existing literature, contextualizing the biological mechanisms underlying the observed clinical improvements.

However, several areas can be enhanced to strengthen the scientific rigor and clinical relevance of the report. Firstly, while subjective improvements in skin quality, texture, and pigmentation are well-documented through photographs and patient-reported outcomes, the inclusion of objective quantitative assessments (e.g., wrinkle depth measurements, skin elasticity tests, standardized aesthetic scoring scales) would significantly enhance the credibility of the findings. Secondly, a more structured reporting of adverse events, even if none were observed, would align with best practices in clinical case reporting and ensure transparency regarding patient safety.

Furthermore, the discussion could benefit from a more critical appraisal of the study's limitations, including the small sample size, lack of a control group, and the subjective nature of outcome assessments. A comparison with other biostimulatory treatments (e.g., PRP, hyaluronic acid fillers, or energy-based devices) would also enrich the relevance of the findings within the broader landscape of facial rejuvenation therapies.

Furthermore, it would be valuable to elaborate on the potential mechanisms by which ozone enhances the regenerative effects of I-PRF, especially considering the limited body of high-level evidence in this area. Suggestions for future research directions, including randomized controlled trials and standardized outcome assessments, would further underline the clinical significance of this preliminary case series.

English language quality

The manuscript is generally well-written and communicates the clinical content effectively. However, minor grammatical inconsistencies and typographical errors are present, particularly with punctuation and hyphenation (e.g., “bio-stimulator” vs. “biostimulator”). Some sentences, especially in the introduction and discussion, could benefit from restructuring to enhance flow and readability. The authors are advised to perform a thorough proofreading for syntax refinement and consistency in terminology. Overall, the English quality is acceptable for publication after minor linguistic polishing.

Title

The title accurately reflects the manuscript's focus and appropriately identifies it as a clinical case study investigating ozonized fibrin-rich plasma (I-PRF) therapy for facial rejuvenation. It is concise, informative, and suitable for the intended audience.

Relevance to the Field

This manuscript addresses an emerging area in regenerative aesthetic medicine. The combination of ozone therapy and I-PRF is a novel approach that may offer a non-surgical, minimally invasive alternative for facial rejuvenation, appealing to practitioners seeking advanced biostimulatory techniques. The work is relevant to clinicians in aesthetic dermatology, dentistry, and regenerative medicine.

Originality: The study presents original clinical data by applying ozonized I-PRF in facial rejuvenation across five patients, a technique that is still underrepresented in scientific literature. While case series inherently have limitations in evidence hierarchy, this paper adds valuable practical insights, contributing to the early exploration of this combined therapy.

Methodology: The authors provide a clear and detailed description of patient selection criteria, preparation of ozonized I-PRE, and the treatment protocol. The methodology is appropriate for a case series format. However, the lack of objective clinical outcome measures (e.g., cutometer readings, validated wrinkle scales) weakens the strength of the evidence presented. Future iterations of this research would benefit from incorporating quantitative assessments to complement the visual documentation and subjective reports.

Risk of Bias: Given the observational nature of the study, it is inherently prone to bias, including selection bias, observer bias, and placebo effects. The absence of a control group or comparator treatment limits the ability to isolate the specific effects of ozonized I-PRE. Additionally, the reliance on subjective assessments without blinding further increases the risk of bias.

Results: The results section effectively describes subjective improvements observed in skin texture, tone, and reduction of fine lines. Sequential photographic documentation supports these findings visually. However, the lack of quantifiable data diminishes the conclusiveness of the outcomes. Despite this, the consistency of reported improvements across all patients is noteworthy.

Discussion: The discussion contextualizes the biological rationale for using ozonized I-PRE, referencing relevant literature to support the observed outcomes. Nevertheless, a more critical analysis comparing this technique with other established facial rejuvenation modalities would enhance the manuscript's depth. Furthermore, a structured limitations section is advised.

Limitations: The manuscript briefly acknowledges the scarcity of literature but should explicitly address limitations, including small sample size, lack of objective assessments, absence of a control group, and potential for subjective bias. Future research recommendations should be elaborated, emphasizing the need for controlled trials.

Conclusion: The conclusion appropriately emphasizes the potential of ozonized I-PRE as a promising biostimulatory therapy for facial rejuvenation. However, a more cautious framing is suggested, highlighting the preliminary nature of the evidence and the necessity for further research to validate these findings

Declarations

Potential competing interests: No potential competing interests to declare.