



Adverse effects in orofacial harmonization procedures: a scoping review

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ABSTRACT

Introduction: In recent years, facial rejuvenation has evolved from surgical approaches toward minimally invasive procedures. However, the growth of these interventions has been accompanied by an increase in reported adverse effects. This context reinforces the importance of careful patient selection, in-depth anatomical knowledge, and the adoption of standardized clinical protocols to achieve safer outcomes.

Objectives: To synthesize current scientific evidence on adverse events associated with orofacial harmonization procedures, focusing on prevention and clinical management. It also aims to identify the main adverse effects and the most frequently affected anatomical areas, contributing to safer clinical decision-making.

Methods: A literature search was conducted using DeCS and MeSH descriptors, combining the keywords *facial esthetics*, *rejuvenation*, and *adverse effects* through Boolean operators. The search was performed on February 1, 2026, in the Medline (PubMed), LILACS, and ScienceDirect databases. Articles published between 2021 and 2026, in English, with free full-text access, and corresponding to narrative or systematic reviews, were included.

Results: Twenty-six studies reporting adverse events in patients undergoing orofacial harmonization procedures were selected. Most of the described complications were mild and self-limiting. However, the most severe events were primarily associated with injectable procedures, namely vascular complications, with a risk of tissue ischemia, alopecia, and vision loss. The studies highlight that risk reduction depends on anatomical knowledge, proper patient selection, informed consent, and the implementation of protocols for early recognition and intervention.

Conclusion: Contemporary aesthetic practice is evolving toward a comprehensive and personalized approach, with a strong emphasis on clinical efficacy and safety. Although minimally invasive, these procedures are not free from immediate or delayed complications. Thus, prevention, early diagnosis, and proper management of complications are essential to ensure patient safety and the quality of outcomes. A limitation of this review is the still limited amount of literature available regarding certain adverse effects.

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