

Interdisciplinary Models of Non-Invasive Aesthetic Support Following Oral and Maxillofacial Procedures

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DOI: <https://doi.org/10.36348/sjodr.2026.v11i09.002>

| Received: 06.07.2026 | Accepted: 31.08.2026 | Published: 04.09.2026

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Abstract

Recovery after oral and maxillofacial interventions often involves temporary functional limitations and visible postoperative changes that may affect psychological well-being and social participation. Conventional postoperative care focuses primarily on surgical success and complication prevention, while supportive recovery experiences receive comparatively less attention. This paper presents a conceptual interdisciplinary framework for integrating non-invasive aesthetic support procedures, specifically specialized compression-vibration protocols and localized microcurrent applications, into recovery pathways following oral and maxillofacial interventions. The conceptual model emphasizes patient-reported recovery experience, collaborative practice, and structured recovery support without replacing conventional medical care. Special attention is given to the role of aesthetic professionals in multidisciplinary environments and to the practical limitations associated with non-medical supportive interventions.

Keywords: Maxillofacial recovery, Interdisciplinary care, Aesthetic support, Patient experience, Oral surgery recovery, Wellness interventions, Supportive recovery models.

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1. INTRODUCTION

Complex oral and maxillofacial surgeries, including dental implant placement and bone grafting, require invasive manipulation of mucosal and osseous tissues. This physical trauma consistently triggers an acute inflammatory cascade. Patients experience functional limitations and visible facial changes immediately following these procedures (Osunde OD *et al.*, 2011). While surgeons successfully restore the mechanical function of the jaw, the healing period presents a complex set of physical and emotional challenges (Song Y *et al.*, 2017). Modern healthcare increasingly recognizes that surviving a procedure or achieving anatomical success does not fully encompass a healthy recovery (Villa A *et al.*, 2018). Patients require comprehensive support to navigate the immediate postoperative phase comfortably.

Conventional dental protocols appropriately prioritize surgical success. They focus heavily on infection control and proper bone integration. Clinical guidelines often leave secondary soft tissue trauma to resolve passively. Individuals frequently endure prolonged facial edema, extensive bruising, and severe

masticatory muscle spasms known as trismus (Dijkstra P *et al.*, 2004). These temporary disfigurements do more than cause physical pain. They trigger significant psychosocial distress and body image dissatisfaction. Patients often isolate themselves socially during the acute healing phase to hide their altered appearance (Penner JL, 2009; Smith JD *et al.*, 2017; Walshaw E *et al.*, 2022).

Medical providers generally rely on pharmacological approaches and basic cold applications to manage these symptoms. Research indicates that standard methods offer only partial and sometimes conflicting relief for superficial swelling and muscle tension (do Nascimento-Júnior ED *et al.*, 2019; Fernandes IA *et al.*, 2019; Larsen MK *et al.*, 2019). The literature provides limited discussion of structured non-pharmacological approaches aimed at supporting the aesthetic recovery of extraoral soft tissues.

In response to these challenges, this paper presents a patient-centered conceptual interdisciplinary support framework. This interdisciplinary framework details how aesthetic practitioners can safely integrate non-invasive support into conventional dental recovery

pathways. The model incorporates localized microcurrent application and cervical compression-vibration interventions as supportive measures for managing soft tissue discomfort. These specific modalities target facial edema, support hematoma resolution, and relieve muscle tension without crossing into the medical domain of the dental surgeon.

The study evaluates subjective patient experiences through Patient-Reported Outcome Measures to illustrate the practical value of this approach (De Bruyn H *et al.*,2015; Feine J *et al.*, 2018). The primary objective is to explore how structured multidisciplinary collaboration may improve the overall recovery experience and facilitate return to routine social activities (Lins R *et al.*,2025; TAVARES LOPES AP, 2026).

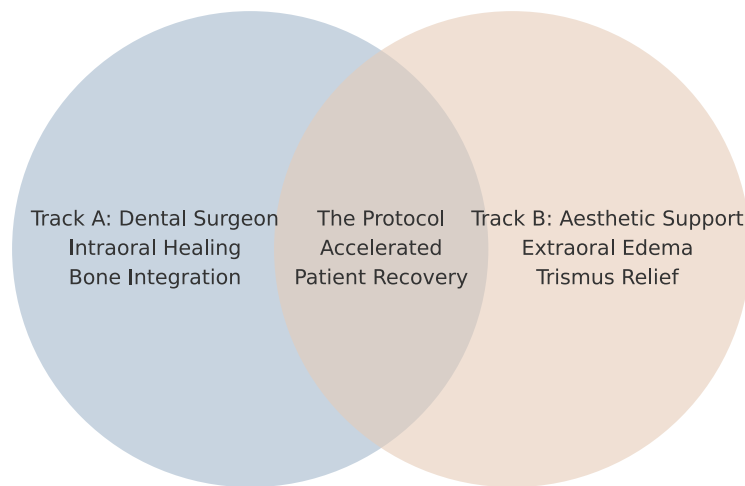


Figure 1: The Maxillofacial Interdisciplinary Recovery Pathway

Facial surgery naturally results in significant physical alterations. Patients commonly experience swelling and bruising during the early postoperative period. These changes may influence body image perception and psychological well-being. Walshaw E *et al* (2022) found that individuals experiencing facial trauma face a high risk of psychological distress and social isolation. Similar psychosocial burdens appear in oncology patients dealing with temporary or permanent facial disfigurement (Penner JL, 2009; Smith JD *et al.*,2017). Researchers note that subjective psychological factors frequently influence a patient's perception of recovery more than objective surgical success (Song Y *et al.*,2017). To counter these negative effects, medical professionals are exploring ways to integrate aesthetic improvements into standard dental care. Recent clinical studies suggest that addressing facial aesthetics directly improves psychosocial functioning and overall life satisfaction (Hoffman L *et al.*,2022; Imadojemu S *et al.*,2013). Related literature has described this broader integration of functional and aesthetic considerations as orthofacial harmonization. It highlights the benefits of combining dental treatments with non-invasive cosmetic support to ensure patients feel comfortable returning to their daily lives (Vornyk V *et al.*,2025).

Clinical guidelines traditionally rely on pharmacological treatments and basic cold application to

manage postoperative inflammation. A comprehensive review by Osunde OD *et al* (2011) concluded that no single traditional method successfully minimizes pain, swelling, and muscle stiffness simultaneously. While intermittent cryotherapy provides some relief for early facial swelling, evidence shows it lacks significant effectiveness for resolving severe trismus or deep tissue tension (do Nascimento-Júnior ED *et al.*,2019; Fernandes IA *et al.*,2019; Larsen MK *et al.*,2019). The medical literature extensively documents the difficulty of treating trismus, particularly when it originates from severe tissue trauma or radiation therapy (Bensadoun R *et al.*,2010; Villa A *et al.*,2018). Existing interventions mostly focus on mechanical jaw exercises and leave superficial soft tissue congestion largely untreated (Cousins N *et al.*,2013; Dijkstra P *et al.*,2004; Wang H *et al.*,2026). This reliance on physical exercises may indicate opportunities for exploring additional supportive approaches for more active physiological support to relax facial muscles and accelerate fluid clearance.

Recognizing the limitations of standard care, researchers have begun investigating various physical therapies to manage facial trauma. Studies demonstrate that low-level laser therapy effectively reduces postoperative pain following oral surgeries, although its impact on swelling remains inconsistent across different

clinical trials (Brignardello-Petersen R *et al.*,2012; Meneses-Santos D *et al.*,2021; Oliveira FJD *et al.*,2021; Passos RM *et al.*,2023). Other supportive methods like elastic therapeutic taping and targeted temperature management have demonstrated encouraging preliminary results in controlling acute localized edema (Pereira RVS *et al.*,2024; Weber dos Santos K *et al.*,2019). Modern protocols increasingly recommend a multimodal approach that combines manual therapy, targeted tissue stimulation, and early rehabilitation exercises to treat complex secondary symptoms (Fernández-de-la-Reguera A *et al.*,2025; TAVARES LOPES AP, 2026). The specific application of localized microcurrents as a supportive modality for postoperative hematomas and mechanical vibration to relieve masticatory spasms requires clearer systematization within these emerging physical therapy models.

The future of maxillofacial recovery relies heavily on collaborative practice. Medical teams recognize that integrating different specialties provides better support for vulnerable patients (Lins R *et al.*,2025; Yang X *et al.*,2026). To accurately measure the success of these collaborative models, researchers increasingly use Patient-Reported Outcome Measures. These specific evaluation tools capture the subjective experience of the patient. They shift the clinical focus from purely mechanical data to personal comfort and aesthetic satisfaction (De Bruyn H *et al.*,2015; Feine J *et al.*,2018). Standardized questionnaires now exist to track recovery across various dental disciplines, proving that patients care deeply about how they look and feel during the healing process (Kanas A *et al.*,2010; Wittneben J *et al.*,2018). Structuring non-medical support through this patient-centered lens allows clinics to safely improve recovery outcomes without disrupting the primary surgical workflow.

A thorough review of the current literature highlights a persistent functional gap in postoperative dental care. Scientific studies have documented the negative psychological effects of facial swelling and restricted jaw movement. They also confirm that standard methods like ice packs and medications fail to completely resolve these secondary complications. At the same time, research has reported beneficial outcomes associated with various physiotherapeutic tools and emphasizes the value of patient-reported comfort. Yet, a practical bridge connecting advanced dental surgery with active aesthetic recovery is currently missing. The proposed framework was developed to address this gap. By organizing previously described physical modalities into a strict non-medical framework, this approach is intended to support management of superficial postoperative facial changes. It synthesizes fragmented research into a clear collaborative pathway that prioritizes the patient's immediate physical comfort and social confidence.

2. Experimental Section

2.1. Core Principles of Interdisciplinary Aesthetic Support

The proposed framework operates on a strict division of clinical responsibilities. Dental surgeons manage the intraoral cavity, bone integration, and surgical site stability. Aesthetic practitioners focus exclusively on the extraoral soft tissues of the face and neck. This separation is intended to minimize interference with medical treatment while addressing patient-reported physical discomfort. Wellness professionals do not touch surgical incisions or modify medical prescriptions. They apply targeted physical therapies to reduce secondary swelling and superficial bruising. Collaborative models that clearly separate medical treatment from supportive care consistently yield higher patient satisfaction and safer recovery environments (Lins R *et al.*,2025; Yang X *et al.*,2026).

Table 1: Demarcation of Post-Dental Care Responsibilities

Parameter	Track A: Clinical Dental Care	Track B: Aesthetic Support
Area of Focus	Intraoral tissues and bone structures	Extraoral soft tissues of the face and neck
Primary Tools	Surgical instruments and dental implants	Microcurrents, vibration, and pressotherapy
Outcome Assessment	X-Rays, CBCT scans, and clinical healing	Subjective PROMs and visual aesthetic comfort

2.2. Modality 1: Localized Microcurrent Application

The first primary tool in this supportive model involves localized microcurrent application. Practitioners deliver low-frequency electrical currents, typically ranging from 10 to 600 microamperes, to the facial tissues. These gentle impulses are intended to interact with tissue through low-intensity electrical stimulation. Microcurrent stimulation has been hypothesized to influence cellular metabolic activity through bioelectrical mechanisms described in previous literature. Some authors have suggested that these processes may contribute to improved local microcirculation. For a dental patient, improved local circulation may support the natural resolution of

postoperative bruising and visible facial hematomas. The therapy achieves this visible aesthetic recovery without triggering active muscle contractions, without directly involving the surgical site.

2.3. Modality 2: Cervico-Collar Compression and Vibration Therapy

The second modality utilizes cervico-collar compression and vibration therapy. Severe dental interventions frequently cause the masticatory muscles to lock, creating a painful condition known as trismus (Dijkstra P *et al.*,2004). Standard care often leaves this muscle tension untreated. The proposed framework applies a specialized mechanical device equipped with

rotating spheres to the neck and jawline. The device delivers rhythmic microvibration and calculated compression to the strained muscle fibers. This mechanical action is intended to reduce perceived muscle tension and support recovery of jaw mobility. Concurrently, the vibration may contribute to fluid mobilization through mechanical stimulation of superficial tissues. It is intended to support fluid mobilization from superficial facial tissues toward normal lymphatic drainage pathways.

2.4. Systemic Support via Pressotherapy and Wellness Wraps

Localized facial treatments work best when supported by systemic therapies. Surgical procedures

may be associated with physiological stress responses and temporary fluid retention. To counteract this response, the protocol incorporates full-body pressotherapy and antioxidant cosmetic wraps. Intermittent pneumatic compression suits stimulate the peripheral lymphatic system and support physiological fluid circulation. The wave-like pressure may also contribute to subjective relaxation and improved perceived comfort. Practitioners often combine this mechanical drainage with complementary wellness-based body wraps. These wellness applications soothe the nervous system and provide a comforting environment that helps patients manage the emotional fatigue associated with complex medical procedures.

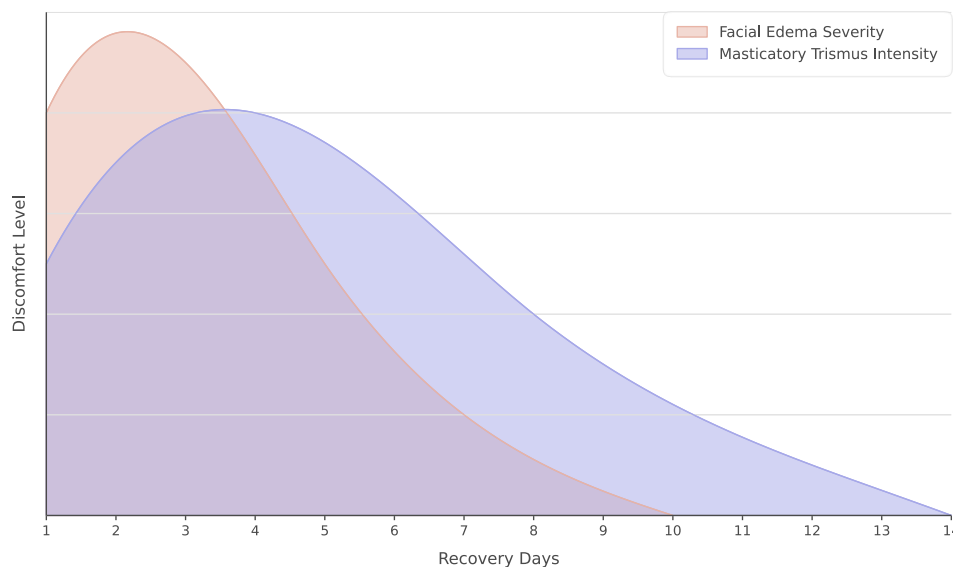


Figure 2: The Extraoral Aesthetic Support Timeline

3. RESULTS AND DISCUSSION

3.1. Case Description 1: Maxillary Intervention

The first observational case involves a 44-year-old female patient requiring extensive upper jaw surgery. Her dental surgeon performed multiple tooth extractions and prepared the alveolar bone for future implant placement. During the immediate postoperative period, the patient developed severe facial swelling, acute tissue soreness, and highly restricted lower jaw mobility. These physical limitations significantly delayed her natural regeneration process and caused considerable discomfort. Standard medical protocols offered limited relief for these specific superficial tissue reactions, leaving the patient to manage her physical and social discomfort passively.

3.2. Case Description 2: Sinus Lifting and Implantation

The second case features a 45-year-old male patient undergoing a complex closed sinus lift and multiple dental implant placements. The procedure also required a mucosal graft taken from the right maxillary

tuberosity to restore adequate soft tissue volume. By the following morning, the patient presented with intense mid-face edema, skin redness, and high tension in the cheek area. He struggled to open his mouth normally and developed a distinct hematoma on his cheekbone. Both clinical cases illustrate the typical secondary trauma associated with invasive oral surgery, clearly highlighting the need for active non-pharmacological supportive care (Osunde OD *et al.*, 2011).

3.3. Application of the Supportive Protocol

Following the proposed interdisciplinary framework, an aesthetic practitioner initiated supportive interventions only after receiving explicit clearance from the primary dental surgeons. Treatment for the male patient began on the fifth postoperative day. The female patient started her recovery sessions on the seventh day. The practitioner tailored the physical therapies to address the specific symptoms of each individual while maintaining safe boundaries away from the intraoral surgical wounds.

For both patients, the practitioner applied localized facial microcurrents three times a week. This targeted electrical stimulation was applied with the intention of supporting local tissue recovery and facilitating visible resolution of postoperative bruising. To treat the restricted jaw movement, the male patient received cervical compression and vibration therapy twice a week. This mechanical stimulation was intended to reduce perceived tension in the surrounding neck and masticatory muscles. Concurrently, the female patient received full-body pressotherapy and specific botanical body wraps. These systemic treatments were used as a supportive wellness intervention and alleviated her overall physiological stress.

3.4. Patient-Reported Outcome Measures

The success of these multidisciplinary interventions was measured using qualitative patient feedback over a two-week evaluation period. Both individuals reported a rapid decrease in physical discomfort. The male patient reported substantial visual

improvement of the hematoma by the eighth postoperative day. By the tenth day, he reported restoration of normal facial movement and could open his mouth freely to chew soft foods. The female patient experienced a similar restoration of jaw mobility and a noticeable reduction in facial swelling, after which she proceeded to the next stage of her dental treatment earlier than originally anticipated.

Beyond the physical relief, the targeted aesthetic support provided substantial psychological benefits. By resolving the visible facial disfigurements quickly, the patients felt less self-conscious and experienced lower levels of social anxiety. They regained their confidence much faster than standard recovery timelines typically allow. This rapid return to normal daily life directly improved their overall satisfaction with the complex dental procedures, demonstrating the profound value of evaluating recovery through subjective patient-reported metrics (De Bruyn H *et al.*,2015; Wittneben J *et al.*,2018).

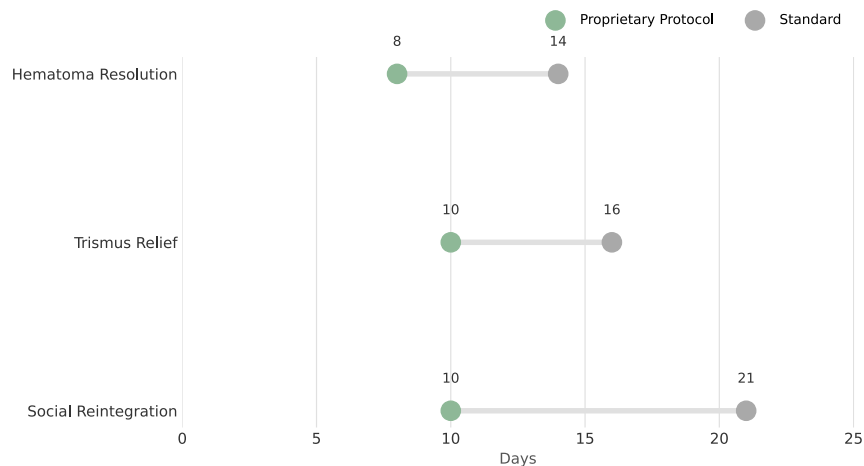


Figure 3: Comparative Resolution of Secondary Surgical Symptoms

3.5. The Value of the Interdisciplinary Ecosystem

Complex dental treatments demand significant physical endurance from the individual. Oral surgeons excel at restoring bone structure and placing implants. They rarely have the clinical time or resources to manage the secondary facial trauma that immediately follows. The proposed framework represents one possible approach to addressing this gap. By partnering with aesthetic professionals, dental clinics can offer a comprehensive recovery package. Patients may perceive earlier relief from facial swelling and muscle stiffness. This immediate physical comfort may contribute to reduced psychological stress and prevent social isolation.

A relaxed and confident patient is much more likely to comply with long-term dental treatment plans. Previous studies suggest that subjective factors, such as feeling physically comfortable and maintaining a normal appearance, dictate a patient's overall satisfaction far more than the technical success of the bone integration

(Song Y *et al.*,2017; Vornyk V *et al.*,2025). Interdisciplinary cooperation may improve the overall recovery experience. Similar studies in oncology and maxillofacial trauma have reported that collaborative care models yield the highest quality of life scores and lower the incidence of postoperative depression (Lins R *et al.*,2025; Penner JL, 2009; Smith JD *et al.*,2017). Integrating aesthetic support may help address emotional and physical concerns reported during recovery.

3.6. Clinical Safety and Feasibility

Implementing a collaborative model requires strict clinical boundaries to ensure patient safety. The oral cavity remains the exclusive domain of the dental surgeon. Aesthetic practitioners must never manipulate the intraoral surgical site or alter prescribed medical regimens. Their work focuses entirely on the extraoral soft tissues of the face, neck, and body. This physical separation aims to ensure that supportive therapies do not

interfere with delicate bone integration or primary wound healing.

Another mandatory safety rule involves the medical referral process. Aesthetic professionals must only initiate physical treatment after receiving explicit clearance from the primary surgeon. The dental specialist determines when the acute inflammatory phase has stabilized enough to tolerate mechanical or electrical stimulation. In the cases considered in this framework, interventions were initiated between the fifth and tenth day following the operation.

Adhering to these specific protocols makes the conceptual framework highly practical for everyday clinical use. Dental surgeons gain a reliable mechanism to manage patient complaints regarding superficial bruising and trismus (Osunde OD *et al.*,2011). Patients receive structured physical relief without jeopardizing their surgical investments. This clear division of labor suggests that non-medical aesthetic therapies can safely support invasive clinical procedures when properly organized (Fernández-de-la-Reguera A *et al.*,2025; TAVARES LOPES AP, 2026; Weber dos Santos K *et al.*,2019; Yang X *et al.*,2026).

4. CONCLUSION

4.1. Summary of Findings

The primary objective of this study was to introduce and evaluate a structured interdisciplinary model for postoperative dental recovery. Complex oral and maxillofacial surgeries consistently produce secondary soft tissue complications such as facial edema, hematomas, and trismus. Standard clinical protocols primarily ensure bone integration and infection control, but frequently overlook the immediate physical comfort and psychosocial well-being of the individual. The proposed conceptual framework proposes a framework intended to address this gap by integrating localized microcurrent application and cervical compression and vibration therapy into the standard recovery timeline. Qualitative feedback from the observational case studies confirmed that targeted aesthetic interventions may alleviate masticatory muscle spasms and support the resolution of facial bruising. Patients reported an accelerated return to normal jaw mobility and social activities. These improvements in subjective comfort were associated with lower perceived anxiety and enhanced overall satisfaction with the complex dental procedures (De Bruyn H *et al.*,2015; Feine J *et al.*,2018). The observations suggest that non-medical supportive interventions may have value within structured interdisciplinary recovery pathways.

4.2. Future Directions

The positive clinical observations highlight the necessity for a broader shift in dental care models. Modern clinics must recognize that achieving mechanical surgical success does not automatically guarantee a positive recovery experience. Establishing

structured multidisciplinary pathways offers a practical solution to this clinical deficit. Future research should prioritize extensive clinical trials to quantitatively measure the impact of aesthetic support modalities on tissue healing. There is also a distinct need to develop standardized educational programs for aesthetic practitioners. These training initiatives would ensure that wellness professionals fully understand the strict clinical boundaries required to work safely alongside dental surgeons. Formalizing this collaborative approach will allow the medical community to create comprehensive recovery ecosystems that fully address both the physiological and emotional needs of the patient (Lins R *et al.*,2025; Yang X *et al.*,2026).

This article is intended as a conceptual and practice-oriented framework rather than a clinical efficacy study. The illustrative cases are presented to demonstrate implementation feasibility and should not be interpreted as evidence of therapeutic effectiveness. Controlled clinical investigations would be required to evaluate efficacy, safety, and reproducibility.

REFERENCES

- Osunde, O. D., Adebola, R. A., & Omeje, U. K. (2011). Management of inflammatory complications in third molar surgery: a review of the literature. *African health sciences*, 11(3), 530-537.
- Song, Y., & Yap, A. (2017). Orthognathic treatment of dentofacial disharmonies: its impact on temporomandibular disorders, quality of life, and psychosocial wellness. *Cranio: The Journal of Craniomandibular Practice*, 35, 168-179. <https://doi.org/10.1080/08869634.2016.1147676>
- Villa, A., & Akintoye, S. (2018). Dental management of patients who have undergone oral cancer therapy. *Dental Clinics of North America*, 62, 131-142. <https://doi.org/10.1016/j.cden.2017.08.010>
- Dijkstra, P., Kalk, W., & Roodenburg, J. (2004). Trismus in head and neck oncology: a systematic review. *Oral Oncology*, 40, 879-889. <https://doi.org/10.1016/j.oraloncology.2004.04.003>
- Penner, J. L. (2009). Psychosocial care of patients with head and neck cancer. *Seminars in Oncology Nursing*, 25, 231-241. <https://doi.org/10.1016/j.soncn.2009.05.008>
- Smith, J. D., Shuman, A., & Riba, M. (2017). Psychosocial issues in patients with head and neck cancer: an updated review with a focus on clinical interventions. *Current Psychiatry Reports*, 19, 33. <https://doi.org/10.1007/s11920-017-0811-9>
- Walshaw, E., Taylor, R., Anderson, J. V., Sexton, P., Parmar, J., & Carter, L. (2022). The psychological sequelae of maxillofacial trauma: a scoping review of the literature. *British Journal of Oral and Maxillofacial Surgery*, 60, 1187-1194. <https://doi.org/10.1016/j.bjoms.2022.09.013>

- do Nascimento-Júnior, E. D., dos Santos, G. S. D., Mendes, M. L. T., Cenci, M., Corrêa, M., Pereira-Cenci, T., & Martins-Filho, P. (2019). Cryotherapy in reducing pain, trismus, and facial swelling after third-molar surgery: Systematic review and meta-analysis of randomized clinical trials. *The Journal of the American Dental Association*, 150, 269-277. <https://doi.org/10.1016/j.adaj.2018.11.008>
- Fernandes, I. A., Armond, A., & Falci, S. (2019). The effectiveness of the cold therapy (cryotherapy) in the management of inflammatory parameters after removal of mandibular third molars: A meta-analysis. *International Archives of Otorhinolaryngology*, 23, 221-228. DOI: 10.1055/s-0039-1677755
- Larsen, M. K., Kofod, T., & Starch-Jensen, T. (2019). Therapeutic efficacy of cryotherapy on facial swelling, pain, trismus and quality of life after surgical removal of mandibular third molars: A systematic review. *Journal of Oral Rehabilitation*, 46, 563-573. <https://doi.org/10.1111/joor.12789>
- De Bruyn, H., Raes, S., Matthys, C., & Cosyn, J. (2015). The current use of patient-centered/reported outcomes in implant dentistry: a systematic review. *Clinical Oral Implants Research*, 26, 845-863. <https://doi.org/10.1111/clr.12634>
- Feine, J., Abou-Ayash, S., Al Mardini, M., de Santana, R. B., Bjelke-Holtermann, T., Bornstein, M., ... & Zubiria, J. P. V. (2018). Group 3 ITI Consensus Report: Patient-reported outcome measures associated with implant dentistry. *Clinical Oral Implants Research*, 29, 270-275. <https://doi.org/10.1111/clr.13299>
- Lins, R., Leal, G., Meguins, G., Ruffeil, I., Rodrigues, C., & Lopes, T. R. M. (2025). The integrated role of nursing and dentistry in aesthetic care for oncology patients. *Contribuciones a las Ciencias Sociales*, 18, 112-128. <https://doi.org/10.55905/revconv.18n.10-081>
- TAVARES LOPES, A. P. (2026). INTEGRAÇÃO ENTRE FISIOTERAPIA E ODONTOLOGIA NA REABILITAÇÃO PÓS-CIRURGIA ORTOGNÁTICA: REVISÃO DA LITERATURA (2020-2025). *International Integralize Scientific*, 3, 45-62. <https://doi.org/10.63391/0tdvcs66>
- Hoffman, L., & Fabi, S. (2022). Look Better, Feel Better, Live Better? The Impact of Minimally Invasive Aesthetic Procedures on Satisfaction with Appearance and Psychosocial Wellbeing. *The Journal of clinical and aesthetic dermatology*, 15(5), 47-58.
- Imadojemu, S., Sarwer, D., Percec, I., Sonnad, S., Goldsack, J., Berman, M., & Sobanko, J. (2013). Influence of surgical and minimally invasive facial cosmetic procedures on psychosocial outcomes: a systematic review. *JAMA Dermatology*, 149, 1325-1333. DOI: 10.1001/jamadermatol.2013.6812
- Vornyk, V., & Potapchuk, A. (2025). Orthofacial harmonisation of dental patients' faces: A review of research. *Wiadomosci Lekarskie*, 78, 234-241. <https://doi.org/10.36740/WLek/214794>
- Bensadoun, R., Riesenbeck, D., Lockhart, P., Elting, L., Spijkervet, F., Brennan, M., & Oral Care Study Group Multinational Association for Sup Trismus Section. (2010). A systematic review of trismus induced by cancer therapies in head and neck cancer patients. *Supportive Care in Cancer*, 18, 1033-1038. <https://doi.org/10.1007/s00520-010-0847-4>
- Cousins, N., Macaulay, F., Lang, H., MacGillivray, S., & Wells, M. (2013). A systematic review of interventions for eating and drinking problems following treatment for head and neck cancer suggests a need to look beyond swallowing and trismus. *Oral Oncology*, 49, 387-400. <https://doi.org/10.1016/j.oraloncology.2012.12.002>
- Wang, H., An, Y., & Liu, D. (2026). The effect of rehabilitation interventions on trismus in oral cancer patients: A systematic review. *Oral Diseases*, 32, 156-167. <https://doi.org/10.1111/odi.70185>
- Brignardello-Petersen, R., Carrasco-Labra, A., Araya, I., Yanine, N., Beyene, J., & Shah, P. (2012). Is adjuvant laser therapy effective for preventing pain, swelling, and trismus after surgical removal of impacted mandibular third molars? A systematic review and meta-analysis. *Journal of Oral and Maxillofacial Surgery*, 70, 1789-1801. <https://doi.org/10.1016/j.joms.2012.01.008>
- Meneses-Santos, D., Costa, M., Inocêncio, G. S. G., Almeida, A. C., Vieira, W., Lima, I. F. P., & Paranhos, L. (2021). Effects of low-level laser therapy on reducing pain, edema, and trismus after orthognathic surgery: a systematic review. *Lasers in Medical Science*, 36, 1789-1798. <https://doi.org/10.1007/s10103-021-03467-y>
- Oliveira, F. J. D., Brasil, G. M. L. C., Soares, G. P. A., Paiva, D. F. F., & Souza Júnior, F. A. (2021). Use of low-level laser therapy to reduce postoperative pain, edema, and trismus following third molar surgery: A systematic review and meta-analysis. *Journal of Cranio-Maxillo-Facial Surgery*, 49, 1088-1096. <https://doi.org/10.1016/j.jcms.2021.06.006>
- Passos, R. M., Pimentel, K. F., de Barros Silva, P. G., Sousa, F., Costa, F., & Cetira Filho, E. L. (2023). Effectiveness of low-intensity laser photobiomodulation in reducing inflammatory events (pain, edema, and trismus) after orthognathic surgery: a systematic review and meta-analysis of randomized clinical trials. *Clinical Oral Investigations*, 27, 1841-1855. <https://doi.org/10.1007/s00784-023-05222-9>
- Pereira, R. V. S., Moraes, S., Monteiro, J., Gomes, A. C. A., Pellizzer, E., & Vasconcelos, B. (2024). Effectiveness of elastic therapeutic tape in reducing edema, pain and trismus following surgery for facial fractures: A systematic review and meta-analysis. *Journal of Clinical Medicine*, 13, 2847. <https://doi.org/10.3390/jcm13040997>

-
- Weber dos Santos, K., Rech, R., Wendland, E., & Hilgert, J. (2019). Rehabilitation strategies in maxillofacial trauma: systematic review and meta-analysis. *Oral and Maxillofacial Surgery*, 23, 289-299. <https://doi.org/10.1007/s10006-019-00808-8>
 - Fernández-de-la-Reguera, A., Muñoz, A., Sotelo, O., & Toledo, X. (2025). Multimodal physiotherapeutic management of postoperative complications in orthognathic surgery: A literature review and institutional protocol proposal. *Medicina Oral*, 30, 45-58. DOI: 10.4317/medoral.27687
 - Yang, X.-Y., Liu, X., Cui, L., Li, Y., & Hou, L. (2026). The impact of mental interventions on psychological adjustment and social recovery in patients with oral and maxillofacial tumors: A scoping review. *Psycho-Oncology*, 35, 78-89. <https://doi.org/10.1002/pon.70376>
 - Kanatas, A., & Rogers, S. (2010). A systematic review of patient self-completed questionnaires suitable for oral and maxillofacial surgery. *British Journal of Oral and Maxillofacial Surgery*, 48, 579-590. <https://doi.org/10.1016/j.bjoms.2009.12.004>
 - Wittneben, J., Wismeijer, D., Brägger, U., Joda, T., & Abou-Ayash, S. (2018). Patient-reported outcome measures focusing on aesthetics of implant- and tooth-supported fixed dental prostheses: A systematic review and meta-analysis. *Clinical Oral Implants Research*, 29, 224-240. <https://doi.org/10.1111/clr.13295>