

SCIENTIFIC ARCHIVES OF DENTAL SCIENCES

Volume 3 Issue 5 May 2020

Opinion

Facial Fillers: Risk Factor for Non-Medical Health Professions

Irineu Gregnanin Pedron^{1*}, Rafaela Rodrigues Cavalcanti², Viviane Cristina Longuini de Menezes³, Jorge Eduardo de Menezes³, Leopoldo Penteado Nucci da Silva⁴ and Caleb Shitsuka⁵

¹Department of Periodontology, Implantology, Stomatology and Therapeutics, Universidade Brasil, São Paulo, Brazil

*Corresponding Author: Irineu Gregnanin Pedron, Department of Periodontology, Implantology, Stomatology and Therapeutics, Universidade Brasil, São Paulo, Brazil. E-mail: igpedron@alumni.usp.br

Received: March 22, 2020; Published: April 22, 2020

Orofacial harmonization includes several techniques, such as the application of botulinum toxin (cosmetic or therapeutic); facial fillers; laser therapy and/or biophotonic procedures; collagen inducers (microneedling); autologous blood derivatives; hormonal regulation; surgical removal of the adipose body of Bichat (bichectomy); facial lipoplasty (mechanical or chemical aspiration); facial lifting; and liplifting (surgical lip correction techniques). Other non-medical health professionals, such as dental surgeons, pharmacists, biomedical and nurses, has been practiced this new area of practice [1-3].

In some European countries (Portugal, Spain and Italy), Asia (India) and Latin America, Dentistry or Dental Medicine has guided the opening of this area of performance for other non-medical health professions. In Brazil, the Federal Council of Dentistry regulated orofacial harmonization as a dental specialty in 2019, without, however, consulting the dental class - as was previously done for other specialties - about ethical-legal aspects, labor market and interprofessional relations. In addition to the perception of the need to create the specialty for the benefit of health and social interest [4].

In Brazil, the orofacial harmonization practiced by dentists and other non-medical health professionals has been frankly attacked by the medical class, particularly by dermatologists and plastic surgeons. These attacks were characterized by collective legal actions taken by specialized medical societies, in addition to individual attacks on social networks to dentists who practice such procedures. Recently, lawsuits were dismissed in favor of Dentistry.

Apparently, those victories were in favor of Dentistry. However, the dentist's role in orofacial harmonization is open to much discussion, given that the complications generated by the techniques performed will, absolutely, be treated by plastic surgeons [3,5-7]. In this perspective, the question is: why perform such procedures

if they can become so dangerous to the health of patients and the professional's finance? The victory of Dentistry and other professions then became a dangerous precedent.

Complications from orofacial harmonization techniques are as varied as possible - immediate or delayed - hypersensitivity reactions; erythematous areas (edema and ecchymosis of the skin, characterizing inflammation); oral ulcerations; formation of granulomas (foreign body reactions); infection; pain; necrosis; occlusion of the ophthalmic artery, leading to visual disturbances and blindness; and cerebral ischemia, which may progress to death [6,7]. A study recently reviewed 2,813 adverse events resulting from the use of facial fillers. The most common sites were cheek (915 cases, 32.5%), lips (503 cases, 17.9%) and nasolabial fold (412 cases, 14.6%). The most common reported adverse events were swelling (1,691 cases, 60.1%), nodule (948 cases, 33.7%) and pain (636 cases, 22.6%). More serious complications included intra-arterial injections, which resulted in necrosis and visual symptoms (blurred vision and blindness). The median of the case resolved by verdicts in favor of the author (patient) or agreement was US \$ 600,000. The study also found that in 10 out of 11 cases, the lack of informed consent (in writing) was alleged [7].

Some cases are already being published on social networks by the patients themselves (Figure 1 and 2 - previously authorized for reproduction in this publication). Unfortunately, this posture is necessary precisely to help propagate the risks of the practice of orofacial harmonization by dental surgeons and other professionals. In the case illustrated in figure 1, tissue necrosis caused by the application of hyaluronic acid was repaired - strenuously and slowly - through pharmacological treatment, hyperbaric oxygen therapy and dermatological treatments. Unfortunately, in the second case (Figure 2), tissue necrosis reached greater proportions (in area and depth), in which pharmacological treatments were necessary (antibiotics, corticosteroids anti-inflammatory, platelet anti-aggre-

²Dentist, Private Practice, Recife, Brazil

³Department of Pharmacology Sciences, Universidade Brasil and Faculdades Metropolitanas Unidas, São Paulo, Brazil

⁴Medical School, Centro Universitário do Planalto Central, Brasília, Brazil

⁵Professor, Department of Pediatric Dentistry and Cariology, Universidade Brasil and Faculdades Metropolitanas Unidas, São Paulo, Brazil

gating, systemic anticoagulant and hyaluronidase), hyperbaric oxygen, debridement chemical, multiple dermatological treatments aimed at improving unsightly scars (q-switched Nd:YAG laser, fractional Erbium-glass laser, regenerative therapy with PRP), surgical resection and debridement of all scar tissue and repair through skin graft. It is worth mentioning that, in this second case, several other interventions, surgical or not, will still be necessary. The first case was performed by a biomedical and the second by a dental surgeon, both professional classes regulated for this practice. Certainly, physical and emotional damage will be claimed and the professionals will respond judicially!

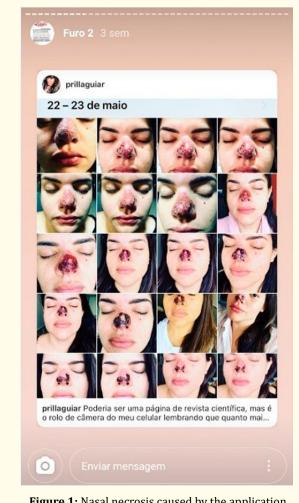


Figure 1: Nasal necrosis caused by the application of hyaluronic acid.

The dental surgeon can be framed in the criminal sphere in several crimes such as: negligence, recklessness and malpractice; bodily injury; omission of help and concealment of crime, among



Figure 2: Nasal necrosis caused by the application of hyaluronic acid. In surgical repair phase with skin graft.

others, depending on the conduct adopted by the professional after the procedure. In addition to the moral, material and aesthetic damage in the civil sphere. Additionally, failing absolutely in the following Law maxim: Obligation ad diligentiam (from Latin, obligation to be diligent).

In Brazil, there has been an increase of approximately 390% in the incidence of problems related to complications resulting from surgeries and aesthetic procedures, considering it to be a public health problem, even if originally caused by private activities.

Bibliography

- Pedron IG. "Botulinum toxin-Applications in Dentistry". Florianópolis: Ed. Ponto (2016): 195.
- 2. Pedron IG. "Therapeutic Indications of the Botulinum Toxin Type A in Dentistry (Editorial)". *Scientific Archives of Dental Sciences* 3.2 (2020): 13-14.

- 3. Pedron IG. "Orofacial Harmonization and Botulinum Toxin Application in the Context of Dentistry". *Scientific Archives of Dental Sciences* 2.9 (2019): 10-11.
- Brazilian Association of Ethics and Legal Dentistry. Technical Note ABOL Nº 03/2019. Subject: Considerations on CFO Resolution 198/2019.
- 5. Pedron IG. "Reflection: A Web of Repentance". *Scientific Archives of Dental Sciences* 2.8 (2019): 31-33.
- Yang Q., et al. "Fatal cerebral infarction and ophthalmic artery occlusion after nasal augmentation with hyaluronic acid - A case report and review of literature". Aesthetic Plastic Surgery 44.2 (2020): 543-548.
- Beauvais D and Ferneini EM. "Complications and litigation associated with injectable facial fillers: A cross-sectional study".
 Journal of Oral and Maxillofacial Surgery 78.1 (2020): 133-140

Volume 2 Issue 5 May 2020

© All rights are reserved by Irineu Gregnanin Pedron., et al.