

Forensic Dentistry and the Identification of the Iatrogenic Lesion in the Patient *In Vivo*

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Received: January 11, 2022; **Published:** April 28, 2022

Forensic Dentistry is part of the forensic sciences and is considered part of Forensic Medicine. It is a specialised service that helps the Judiciary with the purpose of identifying people supposedly involved in crimes or legal matters (civil, administrative, labour, etc) [1-3].

Dental arch research is one of the objects of study of dental experts, because, as well as fingerprints and DNA, they are unique for each human being. In this perspective, the performance of experts in the media, or in films, in the resolution of post-mortem cases is well known [1-3]. However, as it happens in other forensic sciences, especially in Medicine, it is possible for dental surgeons to act as experts in the evaluation of cases and in the performance of forensic tests in police institutions, associated to the government, or in independent consultancies. Obviously, the performance of these professionals depends on the legislation in force in each country, determining the definitions of each crime [1,2].

However, Forensic Dentistry does not operate only in cases of cadaveric identification, in violent or natural deaths [1-3]. Forensic Dentistry also acts in the identification of provoked injuries (iatrogenic) or accidental injuries in living patients, using techniques that aim to compose corroborative information and the preparation of expert reports in public and private, civil or criminal actions [1,2].

Figures 1 to 5 illustrate the case of a Caucasian female patient, 29-years-old, who underwent restorative treatment with direct composite resin veneers. In this case, it is clinically observed the

presence of cervical excess of composite resin (Figure 1), increased buccal-palatal and buccal-lingual thickness (Figure 2) and the presence of inflammatory signs, determining the initial diagnosis of periodontal disease, when flossing (Figure 3). Figure 4 shows the generalized imaging features in the panoramic radiograph and figure 5 shows the excess of composite resin on the mesial surface of the upper left lateral incisor veneer.



Figure 1: Presence of cervical excess of direct composite resin veneers.



Figure 2: Buccal-palatal (A) and buccal-lingual thickness increased (B).



Figure 3: Presence of inflammatory signs, determining the initial diagnosis of periodontal disease, when flossing (A and B).



Figure 4: Generalized imaging features in the panoramic radiograph.

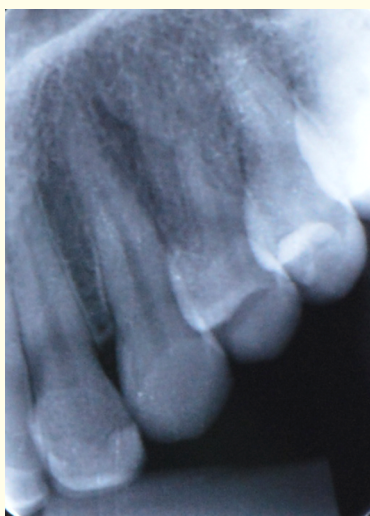


Figure 5: Excess of composite resin observed on the mesial surface of the upper left lateral incisor veneer.

It should be noted that in the present case, the execution of the treatment was inadequate and iatrogenic, and that this professional may be indicted in several lawsuits. In Brazil, the civil sphere determines civil liability, characterized through material, moral and aesthetic damages, provided that the practice of the illicit act, damage and causal link are proven. The illicit act, in turn, presupposes a conduct in the broad sense (through malice, imprudence, negligence or lack of skill). In the field of professional criminal liability, the dental surgeon may be held liable for bodily injury (future loss of teeth), which may lead to a complaint of infraction of the Criminal Code (culpable bodily injury), under the jurisdiction of the Criminal Special Courts [1].

Despite the search for such aesthetic procedures by patients, it is imperative that the dental surgeon conducts the patients in the orientation of possible risks and complications, in addition to the care inherent to the execution of the procedure itself (*Obligatio ad diligentiam*, from the Latin “obligation to be diligent”) and its post-treatment care. Unfortunately, dental surgeons ignore knowledge of dental, bone, facial and soft tissue anthropometry, favouring bad practices from the planning of each case to its execution [1,4]. There should also be a decline in the execution of the treatment by the dental surgeon when facing the request and demand of the patient. In summary, if the patient is duly advised by the dental surgeon not to perform the procedure he or she seeks, explaining possible and foreseeable complications arising from these procedures (such as the development of periodontal disease culminating at the end of this unfortunate trajectory with bone loss and tooth loss), would patients perform these procedures? The educating role of the dental surgeon is praised here! And above all, common sense in the dental practice!

It is also important to emphasize the care and guidance to patients on admission: guidance on oral hygiene, information on the evolution of periodontal disease in these cases of aesthetic veneers that have cervical excesses, and the unrestricted and irrevocable need for veneer removal (risk factor for periodontal disease). If the patient does not agree to the removal of the veneers, a liability waiver must be written about this decision and signed by the patient.

Bibliography

1. Silva RF, Franco A, Oliveira RN, Daruge Jr E, Silva RHA. The history of forensic dentistry in Brazil. Part 1: the origin as

- technique and Science. Rev Bras Odontol Leg RBOL. 2017; 4(2): 87-103.
2. Ribas e Silva V, Terada ASSD, Silva RHA. The importance of the dentist's specialized knowledge into Brazilian forensic team. Rev Bras Odontol Leg RBOL. 2015;2(1):68-90.
 3. Bruce-Chwatt RM. A brief history of forensic odontology since 1775. J Forensic Leg Med. 2010;17(3):127-130.
 4. Pedron IG. The proportions of the Human Figure (The Vitruvian Man) by Leonardo Da Vinci, the Anthropometry and the teeth. SAODS. 2020;3(3):10-11.

Volume 5 Issue 5 May 2022

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