

**EDITOR-IN-CHIEF**

Prof<sup>o</sup> Me. Isabele de Souza Carvalho

**EXECUTIVE EDITOR**

Nathan Albano Valente

**BOOK ORGANIZER**

Seven Publications LTDA

**EDITORIAL PRODUCTION**

Seven Publications Ltda

2023 by Seven Editora

Copyright © Seven Publisher

Text Copyright © 2023 The Authors

Edition Copyright © 2023 Seven Publisher

**TEXT EDITING**

Stefanie Vitoria Garcia de Bastos

**ART EDIT**

Alan Ferreira de Moraes

**COVER IMAGES**

AdobeStok

**LIBRARIAN**

Eliane de Freitas Leite

**AREA OF KNOWLEDGE**

Health Sciences

The content of the text and its data in its form, correctness and reliability are of the author's sole responsibility and does not necessarily represent the official position of Seven Academics Events and Publishing Company. The work can be downloaded and shared if credit is given to the author, but without the possibility of altering it in any way or using it for commercial purposes.

All manuscripts were previously submitted to blind peer review, members of the Editorial Board of this Publisher, and were approved for publication based on criteria of neutrality and academic impartiality.

Seven Publications is committed to ensuring editorial integrity at every stage of the publication process, preventing plagiarism, fraudulent data, or results, and preventing financial interests from compromising the ethical standards of publication. Suspected situations of scientific misconduct will be investigated with the highest academic and ethical rigor.



The contents of this book have been submitted by the author for open access publication, in accordance with the terms and conditions of the Creative Commons 4.0 Attribution License International.

## EDITORIAL BOARD

### EDITOR-IN-CHIEF

Prof<sup>o</sup> Me. Isabele de Souza Carvalho

### EDITORIAL BOARD

: Pedro Henrique Ferreira Marçal. Vale do Rio Doce University  
Adriana Barni Truccolo- State University of Rio Grande do Sul  
Marcos Garcia Costa Morais- State University of Paraíba  
Mônica Maria de Almeida Brainer - Federal Institute of Goiás Campus Ceres  
Caio Vinicius Efigenio Formiga - Pontifical Catholic University of Goiás  
Egas José Armando - Eduardo Mondlane, University of Mozambique.  
Ariane Fernandes da Conceição- Federal University of Triângulo Mineiro  
Wanderson Santos de Farias - University of Sustainable Development  
Maria Gorete Valus -University of Campinas

Current challenges in dentistry [electronic book]  
: theory and clinical practice / Seven  
Publications (organization). -- São José dos  
Pinhais, PR : Seven Events, 2023.  
PDF

Various authors.  
Bibliography.  
ISBN 978-65-84976-82-5

1. endodontics 2. Dentistry 3. Clinical dentistry

24-191007

CDD-617.6  
NLM-WU-100

**Indexes for systematic catalogue:**

1. Dentistry 617.6

Eliane de Freitas Leite - Librarian - CRB 8/8415

**Seven Publications Ltda**  
CNPJ: 43.789.355/0001-14  
[editora@sevenevents.com.br](mailto:editora@sevenevents.com.br)  
São José dos Pinhais/PR

## **AUTHOR'S STATEMENT**

The author of this work DECLARES, for the following purposes, that:

You do not have any commercial interest that creates a conflict of interest in relation to the content published;

Declares to have actively participated in the construction of the respective manuscripts, preferably under the following conditions: "a) Study design, and/or data acquisition, and/or data analysis and interpretation; b) Preparation of the article or review to make the material intellectually relevant; c) Final approval of the manuscript for submission";

Certifies that the published text is completely free of fraudulent data and/or results and authorship defects;

Confirms the correct citation and reference of all data and interpretations of data from others Research;

Acknowledges that it has informed all sources of funding received to carry out the research; Authorizes the editing of the work, including catalog registrations, ISBN, DOI and other indexers, visual design and cover creation, internal layout, as well as its release and dissemination according to the criteria of Seven Academics Events and Publishing Company.

## **PUBLISHER'S STATEMENT**

Seven Publications DECLARES, for the purposes of rights, duties and any methodological or legal meanings, that:

This publication constitutes only a temporary transfer of copyright, constituting a right to publication and reproduction of the materials. The Publisher is not co-responsible for the creation of published manuscripts, under the terms established in the Copyright Law (Law 9610/98), in article 184 of the Penal Code and in article 927 of the Civil Code; The author(s) is solely responsible for verifying such copyright and other issues, holding the Publisher harmless from any civil, administrative, and criminal damages that may arise.

Authorizes the DISSEMINATION OF THE WORK by the author(s) in lectures, courses, events, concerts, media and television, provided that there is due recognition of the authorship and editing and without any commercial purpose, with the presentation of the due CREDITS to SEVEN PUBLICATIONS, being the author(s) and publisher(s) responsible for the omission/exclusion of this information;

All ebooks are open access, so don't sell them on your website, partner sites, e-commerce platforms, or any other virtual or physical medium. Therefore, it is exempt from copyright transfers to authors, since the format does not generate other rights beyond the didactic and advertising purposes of the work, which can be consulted at any time.

All members of the editorial board have doctors and are linked to public institutions of higher education, as recommended by CAPES to obtain the Qualis book;

Seven Academic Events does not assign, sell, or authorize the use of the names and e-mails of the authors, as well as any other data of theirs, for any purpose other than the dissemination of this work, in accordance with the Civil Rights Framework for the Internet, the General Data Protection Law and the Constitution of the Federative Republic.

## AUTHORS

Alexandre Henrique Susin  
Alexandre Weber  
Allan Zimmermann  
Amanda Costa Ferro  
Ana Carolina Duarte  
Corlatti Duarte  
Ana Luiza Barboza Vianna  
Ana Luiza Nascimento  
Maia  
Ana Tereza Silva e Diogo  
Ananda Mirelly Tomé e  
Silva  
Andrea Abi Rached  
Dantas  
Andréa Maria Eleutério de  
Barros Lima Martins  
Andreia Bufalino  
Angela Fernandes  
Anielle Buzatti  
Árlen Almeida Duarte de  
Sousa  
Bárbara Luíza da Silva  
Barbara Quadros Tonelli  
Brenda Matsunaga  
Laurindo  
Bruno Cavalini Cavenago  
Bruno Pereira das Posses  
Camila Silvério Carvalho  
Vieira  
Carla Dias da Costa  
Duque  
Carlos Rogério Pimenta de  
Carvalho  
Carolina Carvalho de  
Oliveira Santos  
Catarina Teixeira Castro  
Cibelly Mara Pereira Araújo  
Cláudia Callegaro de  
Menezes  
Cláudia Maria Navarro  
Daniel Malta  
Daniel Sousa Pardini  
Daniela Pertel Milleri  
Danielle Righes  
Danielle Zorzo Righes



David Barata Garcêz  
Débora Souto-Souza  
Denis Isao Ueoka  
Elaine Maria Sgavioli  
Massucato  
Fabíola Belkiss Santos de  
Oliveira  
Felipe Andretta Copelli  
Fernanda da Silva Prado  
Gabriel Kennedy Barroso  
Geovana Pires da Silva  
Giovana Patucci de  
Almeida  
Glaciele Maria de Souza  
Guilherme Camponogara  
de Freitas  
Hector Michel de Souza  
Rodrigues  
Janis Skoroski  
Jefferson de Sá Buso  
João Pedro da Fonseca de  
Paula  
João Vitor Quadros Tonelli  
Júlia Maria Moreira Santos  
Júlia Rangel de Souza  
Pereira  
Juliana dos Santos Lupp  
Juliana Marfut Henning  
Juliano Magno de  
Valadares Bicalho  
Juliano Sartori Mendonça  
Karla Virgínia Bezerra de  
Castro Soares  
Kleber Borgo Kill  
Larissa Doalla de Almeida  
e Silva  
Lavínia Vieira de Morais  
Costa  
Leonardo Munhoz Torres  
Letícia Krobek da Cunha  
Kill  
Lidiany Karla Azevedo  
Rodrigues Gerage  
Lorenzo Fogliari da Rocha  
Luciana de Araújo Martins

Luis Augusto de Almeida-  
Silva  
Luís Felipe França Ribeiro  
Luiz Fernando Chaves  
Maria Cynésia Medeiros de  
Barros  
Maria Mayara Nascimento  
Beserra  
Mariana Alves Rossi Faleiros  
Mariana Campos Maia  
Maurício Alves de Andrade  
Micéli Beck Guimarães  
Blaya  
Micéli Blaya  
Oscar Fernando Muñoz  
Chávez  
Renan Bertolo Gomes  
Renata Pereira Georjutti  
Ricardo Vallejo Gutierrez  
Roberto Bernardino Júnior  
Rômulo José Lima Almeida  
Rômulo Viero Machado  
Rose Mara Ortega  
Sara Martins Gomes  
Sérgio Lima Santiago  
Sofia Furlanete Raymundo  
Stephanie Quadros Tonelli  
Suellen Tayenne Pedrosa  
Pinto  
Tatiane da Silva Sales  
Thais Martins Jajah Carlos  
Thiago Fonseca-Silva  
Tiago Mortari  
Túlio Bruno Cavalheiro de  
Oliveira  
Vera Lúcia Rangel de  
Souza  
Victor de Mello Palma  
Victor de Mello Palma  
Victor Perez Meireles de  
Souza  
Viviana Pereira Frutuoso  
Vinicius Flores Cielo  
Warley Silva de Oliveira  
Williams Escalante Encinas

## SUMMARY

### **The use of cone beam computed tomography in endodontics**



*Daniel Sousa Pardini, Stephanie Quadros Tonelli, João Vitor Quadros Tonelli, Barbara Quadros Tonelli, Bárbara Luíza da Silva, Luiz Fernando Chaves, Luís Felipe França Ribeiro, Lavínia Vieira de Moraes Costa, Ana Luiza Nascimento Maia and Hector Michel de Souza Rodrigues*

  <https://doi.org/10.56238/sevened2023.005-001>

.....9-21

### **Evaluation of the periapical condition of endodontically treated teeth by cone beam computed tomography**



*Gabriel Kennedy Barroso, Giovana Patucci de Almeida, Juliana Marfut Henning, Felipe Andretta Copelli, Janis Skoroski, Larissa Doalla de Almeida e Silva, Thiago Fonseca-Silva, Angela Fernandes, Bruno Cavallini Cavenago and Carolina Carvalho de Oliveira Santos*

  <https://doi.org/10.56238/sevened2023.005-002>

.....22-33

### **The importance of interpreting complementary laboratory tests in the dental routine: A brief review**



*Juliana dos Santos Lupp and Luis Augusto de Almeida-Silva*

  <https://doi.org/10.56238/sevened2023.005-003>

.....34-46

### **Root caries in elderly patients: A narrative review**



*Maria Mayara Nascimento Beserra, Brenda Matsunaga Laurindo, Luciana de Araújo Martins, Juliano Sartori Mendonça, Sérgio Lima Santiago and Lidiany Karla Azevedo Rodrigues Gerage*

  <https://doi.org/10.56238/sevened2023.005-004>

.....47-58

### **CTZ (chloramphenicol, tetracycline and zinc oxide) obturator paste for primary teeth: An important approach in pediatric dentistry**



*Maria Eduarda Nascimento Martins, Mariana Alves Rossi Faleiros, Maria Aline Moraes Souza, Glaciele Maria de Souza, Renata Pereira Georjutti and Débora Souto-Souza*

  <https://doi.org/10.56238/sevened2023.005-005>

.....59-68

### **Anthropometric analysis of human mandibles as an anatomical structure for sex determination**



*Camila Silvério Carvalho Vieira, Jefferson de Sá Buso, Geovana Pires da Silva and Roberto Bernardino Júnior*

  <https://doi.org/10.56238/sevened2023.005-006>

.....69-83

### **Assessment of oral health literacy in adolescents: Instruments validated in Brazil**



*Fabiola Belkiss Santos de Oliveira, Ana Tereza Silva e Diogo, Árlen Almeida Duarte de Sousa, Júlia Maria Moreira Santos, Maurício Alves de Andrade, Juliano Magno de Valadares Bicalho, Carlos Rogério Pimenta de Carvalho and Andréa Maria Eleutério de Barros Lima Martins*

  <https://doi.org/10.56238/sevened2023.005-007>

.....84-103

## **Hydrocephalus secondary to diverticulum in the quadrigeminal lamina, a case report**



Victor Perez Meireles de Souza, Williams Escalante Encinas, Ricardo Vallejo Gutierrez, Denis Isao Ueoka, Leonardo Munhoz Torres and Allan Zimmermann

  <https://doi.org/10.56238/sevened2023.005-008>

.....104-108

## **Functional and esthetic rehabilitation of a patient with squamous cell carcinoma of the tongue: Case report**



Rose Mara Ortega, Oscar Fernando Muñoz Chávez, Daniel Malta, Andreia Bufalino, Cláudia Maria Navarro and Elaine Maria Sgavioli Massucato

  <https://doi.org/10.56238/sevened2023.005-009>

.....109-115

## **Use of calcium hydroxide as an intracanal medication in permanent teeth: A brief review of the literature**



Cibelly Mara Pereira Araújo, Ana Carolina Duarte Corlatti Duarte, Thais Martins Jajah Carlos, Mariana Alves Rossi Faleiros, Glaciele Maria de Souza, Warley Silva de Oliveira, Túlio Bruno Cavalhero de Oliveira, Renata Pereira Georjutti and Débora Souto-Souza

  <https://doi.org/10.56238/sevened2023.005-010>

.....116-128

## **Dental care for patients with severe intellectual disabilities**



Letícia Krobél da Cunha Kiill, Sara Martins Gomes, Bruno Pereira das Posses, Kleber Borgo Kill and Daniela Pertel Milleri

  <https://doi.org/10.56238/sevened2023.005-011>

.....129-138

## **Factors influencing the efficiency of intraoral scanners in dental prosthesis: Narrative review**



Amanda Costa Ferro, Rômulo José Lima Almeida, Suellen Tayenne Pedrosa Pinto, Sofia Furlanete Raymundo and Andrea Abi Rached Dantas

  <https://doi.org/10.56238/sevened2023.005-012>

.....139-151

## **Study of the relationship between the presence of musculoskeletal disorders and length of work in dental surgeons**


Carla Dias da Costa Duque, Victória Pereira Frutuoso, Catarina Teixeira Castro, Mariana Campos Maia, David Barata Garcêz, João Pedro da Fonseca de Paula, Ananda Mirelly Tomé e Silva and Karla Virgínia Bezerra de Castro Soares

  <https://doi.org/10.56238/sevened2023.005-013>

.....152-160

## **Environmental education in dentistry: Perceptions about mercury in dental amalgam and its harmful effects**



Júlia Rangel de Souza Pereira and Vera Lúcia Rangel de Souza

  <https://doi.org/10.56238/sevened2023.005-014>

.....161-168

## **Perception of Dentistry graduates in relation to professional training with emphasis on interprofessional education**



*Maria Cynésia Medeiros de Barros, Cláudia Callegaro de Menezes, Ana Luiza Barboza Vianna and Fernanda da Silva Prado*

  <https://doi.org/10.56238/sevened2023.005-015>

.....169-183

## **Decoronation: A treatment option for teeth avulsed - Case report**



*Micéli Beck Guimarães Blaya, Alexandre Weber, Danielle Righes, Anielle Buzatti and Víctor de Mello Palma*

  <https://doi.org/10.56238/sevened2023.005-016>

.....184-199

## **Tongue necrosis caused by trauma - Case report**



*Alexandre Weber, Micéli Blaya, Lorenzo Fogliari da Rocha, Victor de Mello Palma, Danielle Righes and Tiago Mortari*

  <https://doi.org/10.56238/sevened2023.005-017>

.....200-203

## **Simulating non-carious cervical lesions by chemical and mechanical alteration on dentin: Bond strength of universal adhesive systems**



*Danielle Zorzo Righes, Micéli Beck Guimarães Blaya, Alexandre Weber, Victor de Mello Palma, Rômulo Viero Machado and Alexandre Henrique Susin*

  <https://doi.org/10.56238/sevened2023.005-018>

.....204-213

## **"Pharmacolandas e Odontolandas": A study on the female presence in Pharmacy and Dentistry courses in São Luís – MA (1940-1970)**



*Tatiane da Silva Sales*

  <https://doi.org/10.56238/sevened2023.005-019>

.....214-223

## **Alteration of the vertical dimension of occlusion: Clinical repercussions**



*Victor de Mello Palma, Alexandre Weber, Danielle Zorzo Righes and Micéli Beck Guimarães Blaya*

  <https://doi.org/10.56238/sevened2023.005-020>

.....224-230

## **The effectiveness of topical anesthesia on pain during oral injections - A randomized clinical trial**

*Danielle Zorzo Righes, Micéli Beck Guimarães Blaya, Alexandre Weber, Vinicius Flores Cielo, Victor de Mello Palma, Guilherme Camponogara de Freitas and Renan Bertolo Gomes*

  <https://doi.org/10.56238/sevened2023.005-021>

.....231-237