

Restoration of teeth with extensive crown damage

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SUMMARY

This text reviews a book in the field of restorative dentistry, published at the end of 2023. Its content and importance for undergraduate and postgraduate teaching, as well as the entire dental professional and scientific public, were analyzed.

One of the biggest challenges in restorative dentistry is the reconstruction of teeth with extensive crown damage. The questions such as how to achieve adequate retention, what is the choice of suitable material and the type of filling as well as the maintenance of the achieved therapeutic results, are only some of the most dominant questions in the reconstructive therapy. In addition to this, unforeseen problems can occur directly during the performance of these procedures. Until now, there was no book available to the professional public with the exclusive subject of the restoration of teeth with extensive damage in the Serbian language. At the end of 2023, a textbook with this topic appeared, edited by prof. dr. Slavoljub Živković, and published by *Data Status* in Belgrade.

This is the first edition of the textbook in this field and is intended for students of integrated and postgraduate studies in dentistry. It can certainly be useful to doctors in their daily dental practice. The editor is Slavoljub Živković, an esteemed professor at the School of Dental Medicine at the University of Belgrade, and the authors of the chapters are also professors from the Department of Restorative Odontology and Endodontics of this Faculty – professors J. Ilić and K. Beljić-Ivanović and assistant professors J. Nešković, D. Manojlović, and M. Popović-Bajic. The book delves into the issue of tooth reconstruction with large defects in an interesting and receptive way, starting from diagnostics and creating a plan to therapeutic procedures and monitoring the achieved success of the therapy. In one part of the book, it also deals with dental traumatology as one of the causes of major damage to the tooth crown.

The textbook consists of nine chapters written by different authors from the domain of their competence. It contains many clinical photographs, diagrams, tables, and protocols, which significantly facilitates the understanding of this complex area. A detailed approach allows readers to follow and understand the presented data with ease. This makes the text easy to read and accessible to readers with different interests and levels of expertise in the field, including students, practitioners, and scientists.

The first chapter represents a kind of introduction to this complex area and deals with the making of a

treatment plan for teeth with extensive damage. The second chapter delves into the issue of reconstructing vital teeth with a small amount of remaining dental tissue. The pathophysiological changes in the pulp-dentine complex in case of large destruction of teeth, the application of bioactive materials and the possibilities of restoration of vital teeth with large crown destruction are analyzed. The third chapter analyzes the requirements and problems related to the restoration of endodontically treated teeth. The fourth chapter deals with traumatic injuries to permanent teeth, considering that they can potentially cause the loss of significant parts of the tooth crown. The fifth chapter provides a detailed analysis of materials used for the reconstruction of large tooth defects with direct fillings. This chapter also presents a useful review of the characteristics of composite materials, which are most commonly used for these purposes. The sixth chapter provides a detailed description and analysis of the use of retention posts in the reconstruction of teeth with extensive damage. Both root canal posts and para-pulpal pins are covered, from their design to indications and methods of application. Chapter seven deals with the application of indirect fillings in this area. Modern principles of cavity preparation, as well as material selection and manufacturing of this type of filling are described. Re-restorative treatment, starting from the correction of inadequate fillings to their complete replacement, is the topic of the eighth chapter. The final, ninth chapter deals with the evaluation of the success of the restorative therapy of teeth with extensive damage to the crown, as well as the factors affecting the durability of fillings.

The textbook represents completely new material in this field in our region. Thanks to the detailed descriptions, as well as the comprehensible and receptive writing style, it will help in the acquisition of basic knowledge for students within integrated studies, but also for those who already have knowledge in this field. It will help the practitioners to improve the diagnosis and development of the therapy plan, as well as the restorative procedure itself. For those involved in science, it will point to some new possible lines of research in this area. This book is full

of information that ultimately results in the improvement of the restorative procedure and the provision of more thorough and high-quality dental health care for patients.

REFERENCE

1. Živković S (editor). Restauracija zuba sa velikim oštećenjima krunice. Beograd: Data Status; 2023.

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