Dental Materials in Operative Dentistry

Christina Mitchell
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In the preface, the author states, “The aim of this book is to summarize, in a concise fashion, current knowledge of dental materials used in operative dentistry.” The author goes on to state that a balance between science and clinical relevance is intended and the book is written for dental students and general dentists. This book is volume five in the Quintessentials for General Dental Practitioners Series, a forty-four volume series edited by Professor Nairn H.F. Wilson. The book is a quick read with many high-quality illustrations.

The book contains eight chapters that cover 120 pages in a compact form that fits easily into the hand. The book covers the following topics: resin composites; compomers and giomers; enamel and dentin adhesives; glass-ionomers; dental amalgam; sealers, liner, and bases; finishing and polishing; and dental curing lights. Each topic is covered by stating the aim of the chapter and the intended learning outcome and providing a brief introduction and indications for use. This is followed by descriptions of the composition of the materials at a very basic level that is appropriate for the intended audience. Clinical examples with high-quality photographs are used to demonstrate the correct use of the materials and to demonstrate the indications. For each material, a description of the unique features (such as fluoride release from glass-ionomer) and their clinical significance are pointed out. The author does a nice job in relating the materials science principles to the indications for use, appropriate clinical technique, and expected clinical outcomes without overcomplicating matters.

For its stated purpose, this book meets its objectives by clearly describing the key fundamental concepts that dentists need to understand to provide high-quality operative dentistry for their patients. The book is ideal for practitioners who have not incorporated adhesive and minimally invasive operative dentistry into their practice and are looking for a good jumping-off point. The book would be valuable to dental students in reviewing key concepts in preparation for board examinations; however, this book does not serve as a robust reference text for studying operative dentistry. Most of the chapters provide fewer than ten references to support the science and clinical recommendations, which is in keeping with the book’s intent. Overall, the material presented is current and, if mastered and followed by all dentists, would improve clinical outcomes.