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BOOK REVIEW

HbA1c—Glycated Hemoglobin and Diabetes Mellitus: A Book Review

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For those of you who want to know more about glycated hemoglobin, there is now a book available that answers (nearly) every question about this fundamental parameter. Professor Helmut R. Henrichs from Germany has written a book entitled, *HbA1c—Glycated Hemoglobin and Diabetes Mellitus*, written in English and distributed by a small German publishing house, that contains an extensive review of this topic.

Diabetologists are quite familiar with the clinical meaning of a hemoglobin A1c value, as this parameter is measured most often to treat patients with diabetes; however, their knowledge is fairly limited with regard to measurement technique, which factors have an impact on the measured results, why certain other diseases/drugs can have a massive impact on the result, and so on. It is interesting to note that, at least to my knowledge, no such comprehensive book has ever been published. Therefore, this book really fills a gap.

In this book, the interested reader can find chapters on all the relevant topics: history, definitions, chemistry and kinetics, measurement methods, preanalytical and external influences, standardization, variability, pathophysiology, and clinical application. A clinician most probably will not read each and every chapter in detail, as this book is mostly for the specialist (e.g., a chapter on biomathematical modeling); however, if he/she is interested in why there is a new number for this parameter (and a different unit) in a laboratory printout, this book describes in great detail the background for the new standardization method, which is considered an important change. Such a change in the measurement/reporting of the fundamental "work horse" of diabetology not only has consequences for clinical practice but also hampers the performance of long-term studies and so on.

These recent changes have gained renewed interest in this parameter, which had greater public awareness and scientific discussion some decades ago. Therefore, most of the references are "old." To state that data/publications are old has a negative connotation in itself; however, it appears as if most scientific questions were answered some time ago and that not many scientists are currently working on this topic. Therefore, to read about the history of this parameter and all the scientific interest it received back then from clinicians, chemists, mathematicians, and so on is similar to traveling back in time and also highlights the paucity of recent publications (except the standardization efforts described earlier).

This book also describes new products that are on the market (or will be available soon) that allow on-site determination of hemoglobin A1c by the physician or the patients themselves (the so-called "near patient testing"); however, one would have loved to have more information about this rapidly evolving area.

For me, this book will occupy a special place in my small collection of diabetes textbooks for when I need

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to find relevant information about glycated hemoglobin quickly. In an era where one usually finds more up-to-date information easily on the Internet instead of reading books, this is a clear recommendation.

HbA1c—Glycated Hemoglobin and Diabetes Mellitus. Helmut R. Henrichs. 1st edition, UNI-MED Verlag AG, Bremen–London–Boston, 2009 (ISBN 978-3-89599-851-3)