

Book Reviews**STUDIES OF NARCOSIS: Charles Ernest Overton**

Edited by Robert L. Lipnick, Wood Library-Museum of Anesthesiology, Chapman and Hall, New York, 1991.

This book is an English translation of Overton's classic German monograph on anesthesiology titled "Studien über die Narkose zugleich ein Beitrag zur allgemeinen Pharmakologie".

The reviewer has often cited Overton's lipid theory without reading through the author's original papers on discussions about the mechanism of anesthesia. After reading through the book now, the reviewer is astonished that the contents of this book did not only take on the theory of anesthesia but also on various other topics. These include the nature of cell membrane, cell membrane permeability, partition coefficients of various drugs between the membrane and its outside (that is, cholesterol-lecithin mixture and water), observation of the drug actions (narcotic action, heart beat, respiration and so on), the relation between narcosis and toxic action, detoxication and so on.

The mechanism of anesthesia especially is one of the most interesting problems for the reviewer. In this respect, the book discusses the partition of narcotics to membrane which is valid for modern concepts of membrane research. In addition, the drug structure-narcotic potency relationships, drug structure-biological response relationships and cut off phenomenon are also included. The sphere of modern biophysical and pharmacological research is scarcely beyond the Overton's world.

And on toxicology, it was least expected that he taught us how to cure the acute patient intoxicated by morphine.

Overton looks like a modern scientist slipped back into the time to the end of the nineteenth century. His analysis and insight from biophysical knowledge based on his bulky experimental data surpasses those of investigators such as Paul Bert of the same period. This book gives us much informations and suggestions on the resolution of up-to-date problems and should be read even by clinical anesthesiologists.

The introductions by Dr. Keith Miller, by Drs. Peter Winter and Leonard Firestone, and by Dr. Robert Lipnick will be a help to understand Overton's points of view on the membrane permeability studies, this book's gravity on anesthesiology, and his contributions to general pharmacology and toxicology, respectively.

It was a pleasure and an honour for the reviewer to have an opportunity to review this book at the request of Prof. K. Amaha, Editor-in-chief of the *J. Anesthesia*.

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