

Cortison

The book, which describes the history of the hormone cortisone between 1900 and 1955 is taken from the author's dissertation on "History of Technology" at the Swiss Federal Institute of Technology Zurich (History of Technology). Readers who expect a simple description of the chemical and pharmacological development of cortisone are in for a surprise. Instead, the book gives a very interesting and unusual overview of the development of a drug, against the background of the circumstances and social history of the times.

In the introductory chapter, the author informs us about her motivation and methodology, and gives a particularly clear and comprehensible introduction to the topic "history of knowledge". The history of knowledge brings to the history of science a sociological—and in this case also commercial and research-political—context. Lea Haller has made an extensive study of the available sources, and has presented the results very competently in a much broader context than the purely scientific one, and this is the major appeal of the book.

The technical aspects of cortisone's development history are addressed in four chapters, each of which deals with a different aspect of adrenal hormones and the state of knowledge at the time. The subjects at the heart of the first chapter are the emergence of endocrinology from 1900, and the controversial discussions associated with this new concept of hormonal regulation by means of chemical substances.

The second chapter is concerned with the quest to understand the mechanism of action of adrenal hormones, the emerging standardization of pharmacological preparations and of the different technical and administrative processes, the competition of companies involved in the field (Organon and Ciba), the role of individual scientists (e.g., Tadeus Reichstein), and finally the development of

DOCA (Percorten), the first synthetic adrenal cortical hormone.

The third chapter is devoted to the controversial discussions around DOCA and its pharmacological effects, and in this context also the debate about the therapeutic benefits of other substances from the adrenal gland extract Cortin. It describes the discussions about "the body in balance and in a state of emergency", and thereby introduces the stress theory formulated by Hans Selye. It addresses applications that go beyond "cure"—i.e., resolution of a physical defect—towards improving the ability of a healthy body to deal with stress situations, such as the administration of such substances to fighter pilots in World War II to increase their physical resistance.

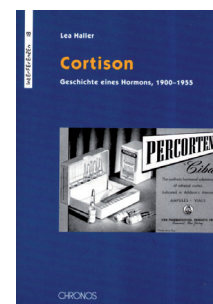
Cortisone itself is the subject of the last chapter. Haller describes the expeditions that were undertaken to ensure the supply of raw materials for the manufacture of cortisone, and the medical revolution triggered by the development of cortisone. She also addresses the ambivalence surrounding it, and the realization that cortisone did not deliver "Heaven on Earth", and that its powerful therapeutic effects had to be paid for with side effects.

In summary, this book extends an invitation to explore the less usual aspects of the development of cortisone. Due to the complexity of the issues and the comprehensive treatment of the subject matter, this book is not an easy read for a relaxed evening. However, the reader is richly rewarded: Lea Haller is extremely eloquent and has succeeded in producing a book which—for all its scientific correctness—is an enjoyable and intriguing read, which both invites and provokes the reader to take a broader look at drug discovery and development beyond the usual confines of chemical, biological, and pharmaceutical processes.

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