

in cases in which the heart and the blood vessels are diseased, may become so pronounced as to render a certain amount of medical skill necessary. Or if, to avoid such pain, it be deemed advisable to administer anesthesia, then must the dentist be constantly on his guard that no more than the proper amount of anesthetic is given, which he can do intelligently only by observing the condition of the nervous and circulatory systems.

Besides knowing something about the physiology of the body as a whole, the dentist must be particularly familiar with the local physiology of the mouth, such as the finely coordinated nervous mechanisms involved in the acts of mastication and swallowing and the secretion of saliva. He must understand the nature of the sensations of the teeth and buccal mucosa, and be on the lookout for any lesions of the cranial nerves that supply the muscles and other tissues adjacent to the mouth cavity.

The chemistry of the saliva has demanded special attention because of the very interesting scientific investigations which are being prosecuted regarding the nature of the undoubted relationship that exists between changes in the saliva and the incidence of dental caries. To adequately describe the present status of this work we have found it necessary to devote some space (in the second chapter) to a review of the main physico-chemical principles which may regulate the reaction and neutralizing power of saliva.

Whenever the occasion presented itself to do so, we have given a brief description of the general nature of the diseases in which dental involvement is possible.

A few simple, but very instructive, laboratory demonstrations are described in an appendix at the close of the book. We have found that such demonstrations furnish an invaluable aid in the teaching of the subject.

To facilitate a clear understanding of the subject, diagrams have been used whenever necessary, and many of these have been specially drawn for the work. To Prof. T. Wingate Todd and Mr. W. M. Spurney, the authors are deeply indebted for the valuable assistance which they gave in the preparation of these.

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