NOVAK'S

GYNECOLOGIC AND OBSTETRIC PATHOLOGY

With Clinical and Endocrine Relations

Novak and Woodruff

Eighth Edition

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Gynecologic and Obstetric Pathology
With Clinical and Endocrine Relations

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PREFACE TO THE EIGHTH EDITION

The eighth edition of our textbook has appeared somewhat later than new editions usually appear, but the last revision was so well received and has continued to have such a wide sale that we have procrastinated. Actually in a pathologic text there are usually relatively few truly revolutional concepts and new thoughts in any decade, and this seems especially true in the 1970s. There has been considerable experimentation in various methods of population control, and we have attempted a more detailed explanation and illustration as to how these may modify pelvic pathology. Newer concepts of oncology have likewise been reevaluated. In an effort to save space, we have on occasion abbreviated the titles of certain references, but the references themselves seem up to date. Various older ones may be found in earlier editions.

We trust that this eighth edition of our textbook will receive the same warm reception, and will continue to have the same extensive sale, as our previous edition. We have tried to improve it in every way possible. At the same time we have tried to streamline it somewhat to avoid making it too bulky and cumbersome. We had occasion to note that the seventh edition was approximately twice the size of the fourth edition, which was published in 1956 by Novak and Novak.

Obviously any pathology textbook will be concerned with oncology, and every attempt has been made to update the book by covering the newest and most recent concepts without becoming too involved with the treatment of these diseases, which seems permissible in a primarily pathologic textbook. As mentioned in earlier editions, it is our feeling that the TNM method of classification of the extent of pelvic tumors is extremely cumbersome and impractical, and consequently we have not utilized it extensively in this text.

Since this pathologic textbook is widely read over the entire world and appears in many different languages, we have enlarged discussion of various

tropical disorders that may afflict the female genital tract. This addition follows many suggestions by Middle and Far Eastern critics; although we have expanded our coverage, we still feel that these subjects belong primarily in various textbooks of tropical medicine, so coverage here is not extensive.

Adequate illustrative material is of extreme importance in any pathologic treatise, and we have continued to try to improve on these. In most instances black and white photographs seem satisfactory, but we have included a number of color plates, some of which are new in this textbook.

We should like to welcome Dr. Carl Pauerstein as a contributor to this text, and thank him for his outstanding chapters. We continue our appreciation to Dr. J. K. Frost for his well written chapter on cytopathology, which has received the highest approval in previous reviews of this textbook. Aside from these, we are the sole authors, and although each of us is responsible for certain chapters, there is frequent mutual discussion, so that the vast majority of the text represents a compendium of our ideas. This seems preferable to presenting isolated chapters by a variety of authors, who may discuss closely allied topics with a lack of consistency and coordination.

We wish to formally thank those who have been good enough to send material to our laboratory. In all cases we have attempted to give proper acknowledgment, but we may have inadvertently omitted credit in a few instances. On occasion we have utilized pictures that may not be of the highest technical quality, but this seems justifiable if it allows illustration of lesions only rarely encountered.

We are indebted to a number of individuals whose ideas or illustrations are incorporated. Thanks for invaluable help as always go to Miss Helen Clayton, as well as to Chester Reather and Raymond (Pete) Lund of our Photographic Department. We should also like to express our gratitude to the many nice people associated with the W. B. Saunders Company, who were so helpful and cognizant of the various difficulties associated with compiling this edition. Thanks again go to The Williams & Wilkins Company for permission to use various illustrations and figures, which we have done without specific notation.

We sincerely trust this edition of the text will represent continued improvement. We feel strongly that this is a legacy of Emil Novak and warrants our utmost dedicated efforts.

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CONTENTS

Chapter 1

DISEASES OF THE VULVA

NORMAL HISTOLOGY OF VULVA

The external genitalia—specifically the labia majora and minora, the clitoris, and the vestibule with its associated glands—are of ectodermal origin (Fig. 1–1). The labia majora are longitudinal folds of fat whose lining epithelium is stratified squamous, with varying degrees of surface maturation and keratinization, and with an underlying layer of connective tissue corresponding to the dartos of the male scrotum. The labia majora are practically absent in the young child, their development—primarily the deposition of fat—being one of the secondary sex characteristics heralding puberty. The skin of the more prominent portions of the labia is pigmented. These folds are rich in hair follicles, sebaceous glands, and sudoriferous glands (Fig. 1–2). The latter include the unique apocrine glands found in special areas, e.g., the axilla, perianal region, and breast, and characterized by "decapitation" secretion, in contrast to the characteristic cellular loss of the sebaceous (holocrine) gland and the cytoplasmic secretory activity of the merocrine gland (Fig. 1–3). Because the onset of secretion occurs at puberty and the cyclic nature of the activity corresponds to that of the ovary, Way and Memmesheimer consider these apocrine glands to be "accessory sex glands." The knowledge of this cyclic activity is important in the diagnosis and treatment of certain vulvar diseases.

The mons pubis (mons veneris) is a cushion of fat covered by skin and its appendages, including the apocrine glands. The labia minora are firmer structures than the majora, and are composed primarily of vascular connective tissue. The surface stratified epithelium is characterized by a relative absence of both the granular layer of the epithelium and hair follicles. The numerous sebaceous glands secrete directly onto the skin through epithelial tunnels (Fig. 1–4). Apocrine glands, although present, are infrequent.

The clitoris, like its male homologue, is made up of vascular erectile tissue, differing from the penis in that it lacks the corpus spongiosum. From an embryologic standpoint the two vestibulovaginal bulbs, which are congeries of veins situated beneath the anterior portion of the labial structures, correspond in the female to a divided corpus cavernosum, i.e., they are made up of two corpora with an intricate network of nerves (Fig. 1–5).

The female urethra, opening externally at the meatus urinarius, is lined by transitional epithelium with the stratified epithelium of the vaginal mucosa present at or near the orifice. At the lower border of the meatus are the openings of the Skene's ducts (paraurethral ducts), tiny tortuous canals coursing just beneath the urethra for a distance of about 1.5 cm.; they are lined by squamous epithelium, and may be the seat of infection inaccessible to treatment by local applications. Studies have shown that the canal is almost completely surrounded by a labyrinth of paraurethral glands entering the distal urethra from its posterior aspect. Huffman considered these structures to be the homologues of the male prostate.

Occlusion of one or more of these glands produces cyst formation and the subsequent infection may result in the development of a suburethral abscess, an occasional cause of urinary retention in the female. In cases of recurrent urinary tract infection, the paraurethral canals should be suspected as a

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