

CONWAY • TUMORS OF THE SKIN

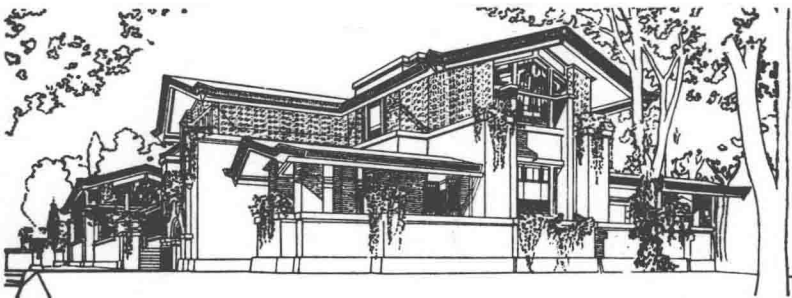


TUMORS *of the* SKIN

By

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Dedicated
to the memory of my mentors,
George Julius Heuer
and
Mont Rogers Reid

Introduction

THIS MONOGRAPH presents benign and malignant tumors of the skin with consideration of clinical characteristics, growth factors, statistics as to the frequency of occurrence, treatment by surgical and non-surgical methods and follow-up data as selected from the medical literature and from the case records of The New York Hospital-Cornell Medical Center. Each type of tumor is presented as briefly as possible with the idea that this monograph should serve as a ready reference text. The presentation also is developed to serve as an aid to diagnosis and a guide to treatment. The text is illustrated with photographs of patients taken from a collection accumulated by the author over a period of twenty years in The New York Hospital-Cornell Medical Center. Emphasis is placed on surgical treatment. Relative frequency of occurrence and clinical importance of certain of the tumors of the skin have dictated that a large part of the text be devoted to the diagnosis and management of hemangiomas, moles, melanomas, and carcinomas of the skin. Artist's sketches of techniques of operation are included as a guide to experienced surgeons who may be called upon to employ the methods of plastic surgery in the management of tumors of the skin. These are also intended to provide understanding of surgical methods to those who otherwise might consider tumors in special locations to be outside the scope of excisional surgery. However, such details of operative surgery as set down in this text have not been prepared with the idea of teaching surgery to those who are not trained in the field.

This monograph is supported by a short bibliography inserted following the discussion of each of the various tumors. The bibliography is not complete but is provided as a guide to the student or surgeon who may elect to further pursue a particular subject. Remote classical references as well as recent references are included.

Lectures to medical students in the Department of Surgery of Cornell University Medical College, given over a period of twenty years, have provided the framework of the book. The material of the Surgical Pathology Laboratory of The New York Hospital-Cornell Medical Center has been drawn upon freely in the preparation of this volume. The techniques of surgery, including the use of skin grafts and pedicle flaps, are presented briefly in discussion of the surgical management of cutaneous tumors in particular anatomical locations. The book does not deal extensively with radiation techniques or other non-surgical methods of treatment but stresses the indications for their use in the management of certain tumors.

Because of the fact that certain tumors subadjacent to the skin, such as ganglion, cystic hygroma, lymphoblastoma, etc., enter into the differential diagnosis of tumors of the skin and especially since these present as irregularities of the cutaneous surface, the author has included them in the monograph.

Acknowledgments

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HERBERT CONWAY

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TUMORS of the SKIN

PART I

BENIGN TUMORS OF THE SKIN

Cysts, Sinuses and Fistulae

Sebaceous cysts (atheroma cutis, wen, steatoma) are cutaneous swellings which develop as a result of blocking of the anatomically constricted necks and the short, narrow ducts of the sebaceous glands by their secretion, sebum. They are lined by flattened epidermal cells. The anatomical distribution of sebaceous glands is coextensive with that of hairs. Therefore, sebaceous cysts may be found anywhere on the body with the exception of the soles of the feet and the palms of the hands. The scalp and the retro-auricular skin are favorite sites for the occurrence of multiple sebaceous cysts. They are recognized by their cystic consistency and by the frequent presence of a dimpled scar over the dome of the swelling. Their incidence is recorded by Gross who found 248 sebaceous cysts among 6,600 surgical specimens (an incidence of 3.8 per cent) consecutively submitted to his laboratory. Data from the Surgical Pathology Laboratory at The New York Hospital for the six years ending in 1953 show that 1,125 sebaceous cysts were found among 38,920 specimens (22,654 tumor specimens), an incidence of 2.8 per cent.

Surgical excision is the *treatment* of choice. In order to prevent recurrence, the entire cyst must be removed without its rupture. Therefore, rubor over the cystic area, evidence of secondary infection, is a contraindication to excision for infected cysts often rupture during operative removal. Such rupture may leave epithelial cells behind from which recurrence may

develop. Infected cysts should be treated by simple incision and drainage, with the plan of excision at a later date. Repeated inflammation, spontaneous rupture, or surgical incision results in thinning of the overlying skin. Therefore, in order to effect excision of the cyst without its rupture and to afford good marginal flaps for coaptation of the wound, the technique of elliptical excision of the overlying thin skin is ideal. The long axis of the ellipse should parallel the wrinkled lines of the face, torso or extremities in order to obtain ideal healing with minimum cicatrix. Multiple cysts in the retro-auricular area with regional fibrosis as the result of repeated infections require that a large elliptical section of cyst-bearing skin be removed. In the management of multiple cysts of the scalp the patient often objects to the shaving necessary for surgical excision. For sebaceous cysts of the scalp, the technique of the late Mont Reid is very satisfactory and it obviates the need for shaving the scalp.

It is the author's opinion that sebaceous cysts very rarely undergo malignant degeneration. However, there are several reports in the literature which indicate otherwise. Bishop found eleven cases of carcinoma among 119 cysts and keratomas. Caylor reported twelve malignant tumors in a series of 236 cysts, a frequency of 3.44 per cent. Stone and Abbey's figures placed the frequency of malignancy in sebaceous cysts at 2.2 per cent. Stark found seven cases of carcinoma among 603 sebaceous

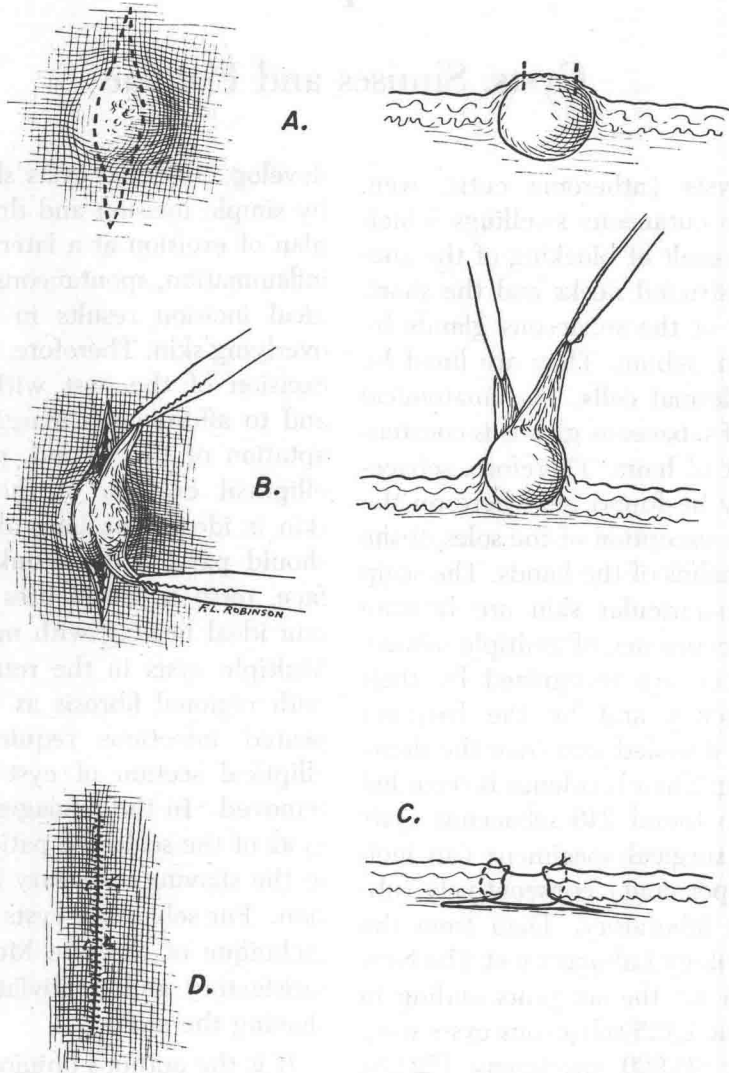


Figure 1. Technique of excision of a sebaceous cyst. (a) The artist depicts the thinning of the skin over the surface of the cyst, often with the scars of multiple successive drainage points. (b) Elliptical excision is made over the cyst in such a way that most of the thin skin is removed. Gentle traction is made by hemostats on the skin at the upper and lower extensions of the ellipse; by blunt dissection the cyst is delivered. (c) This leaves a flap of skin and fat which is undermined and approximated with on-end mattress sutures supported by finer sutures (d) in the skin.

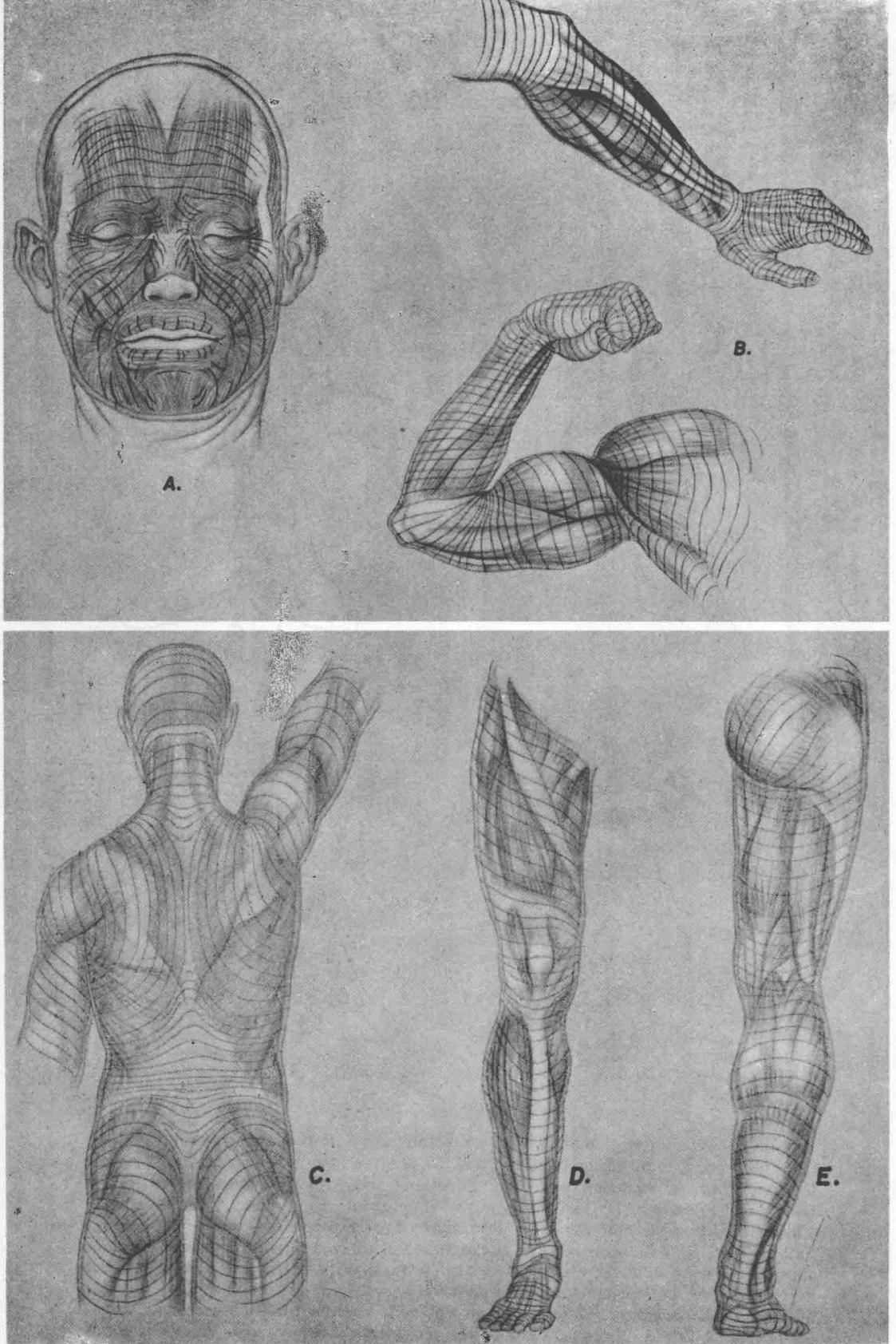


Figure 2. (a) Lines of elasticity of the face run at right angles to the long axis of the musculature. (After Kraissl and Conway: *Surgery*, 25:592, 1949.) (b) Lines of elasticity of the shoulder, arm and forearm. (c) Lines of elasticity of the posterior aspect of the trunk, (d) of the anterior leg, and (e) of the posterior leg.