GYNECOLOGIC ONCOLOGY

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GYNECOLOGIC ONCOLOGY

TO

R. LEE CLARK, M.D., a physician whose deep compassion for human suffering has been the impetus for seeking the best means to alleviate the pain of cancer and allied diseases.

R. Lee Clark's abiding belief in the eventual medical and scientific control of cancer and, thereby, of numerous other human diseases, has sustained his lifelong and eminently successful efforts to build an institution dedicated to cancer research and education as well as patient care. The philosophy of The University of Texas M. D. Anderson Hospital and Tumor Institute in Houston, Texas, centers on a team of biomedical specialists from every discipline working in concert to develop innovative and increasingly better means for the control of cancer. This team of dedicated people, under the imaginative leadership of Dr. Clark, has attracted the admiration of other cancer specialists around the world. As a result, Dr. Clark has responded to numerous requests from national and international sources to participate in planning worldwide cooperative programs for better control of cancer and prevention of many types of cancer.

PREFACE

Any physician who receives women as patients has an opportunity to detect gynecologic cancer. Although the patient may be referred for treament when cancer is discovered, many physicians become involved in management in varying degrees. Thus a basic knowledge of gynecologic cancer must be part of all physician education. Although he may not be planning to participate in the treatment of gynecologic cancer, any physician may be obliged to counsel his patients and refer them for proper treatment. Gynecologic cancer crosses the boundaries of specialization in medical practice and may involve physicians in fields completely unrelated to gynecology. The generalist and the internist are alert to the possibilities of gynecologic cancer because they customarily approach the patient's complaint with a broad diagnostic view. Often the internist is the first to be consulted by a patient with ovarian cancer because the patient's complaints resemble those of intestinal tract disease. Sometimes the urologist or proctologist may be the first specialist consulted because the symptoms produced by a pelvic mass of ovarian carcinoma resemble a bladder problem; similar effects may distend the perirectal veins and cause hemorrhoids. The roentgenologist may be the first to see the shadow of an ovarian neoplasm. A gastrointestinal series is often requested for patients with carcinoma of the ovary before the diagnosis is known. Metastatic lesions of gynecologic cancer may involve lung, bone, lymph nodes, and liver. Like other types of cancer, metastasis may produce the initial symptoms of gynecologic cancer. Thus all physicians should be prepared to deal with cancer at any site, and because gynecologic cancer is one of the more common neoplasms, an overall view of the management of gynecologic cancer is basic information for clinicians.

In this book we plan to present such information in a straightforward manner, by using simple publication techniques that can be kept current. This book is not intended to be a textbook in gynecologic oncology, rather it is a collection of lectures that the three authors have presented as a postgraduate course on this subject.

We often share similar opinions, having worked together for several years, and consult one another frequently about clinical problems. Although we agree on many topics of treatment, each of us has individual preferences about some features of gynecologic cancer. We have deliberately presented our personal views as recommendations. If at times this seems didactic and opinionated, our aim is to provide positive and definite advice rather than a broad, indecisive, and more complete review of topics. We have left little opportunity for the reader to choose from a broad presentation of differing opinions.

We work in institutions in which special facilities are available for managing cancer patients. Since these facilities and the special situations we encounter influence our practice, our advice for management may not be applicable to physicians in other geographic areas. In presenting the material dealing with surgical techniques, we are likely to show considerable personal prejudice and clinical bias. The methods of radiation therapy are strongly representative of

Dr. Gilbert Fletcher's teachings at the M. D. Anderson Hospital. Our experiences in chemotherapy are personal ones. Since this is the newest of treatment modalities and the least settled, it is constantly changing.

Although we function primarily as pelvic surgeons, we are gynecologic oncologists, which implies a working knowledge of radiotherapy, and active participants in the use of chemotherapy for gynecologic cancer. The student planning a career in this field is therefore urged to prepare to treat these patients with all three modalities.

FELIX RUTLEDGE, M. D.
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Houston, Texas
August 1975

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CARCINOMA OF THE CERVIX

CHAPTER 1 CURRENT CONCEPTS: CERVICAL INTRAEPITHELIAL NEOPLASIA (Carcinoma In Situ and Dysplasia)

RICHARD C. BORONOW, M.D.

CURRENT CONTROVERSIES

1. Should all patients with atypical cytology have cervical conization?
2. What is the significance of dysplasia?
3. Should vaginal "cuff" be excised when treating carcinoma in situ?

In the United States today fewer women die annually from carcinoma of the cervix than in any period in modern American medical history. Areas of clinical progress include (1) increased utilization of cervical cytology, (2) better assessment and evaluation of the patient with an abnormal Pap smear, (3) better primary therapy. In addition, certain areas of research progress include (1) the possible relationship of herpesvirus type 2 (HSV-2) to cervical neoplasia,[1] (2) a better understanding of the spectrum of cervical intraepithelial neoplasia, (3) clinical trials that lead to better primary therapy for invasive cervix cancer. While the mortality rate from this disease is constantly decreasing on the national level, we also see a reversal in the ratio of cases of carcinoma in situ and invasive cancer. Yet invasive cervical cancer remains a significant cause of morbidity and mortality. With currently available techniques and methodology, however, death from invasive cancer of the cervix becomes theoretically preventable. This disease can be detected and cured in its preclinical and preinvasive phases.

To include dysplasia with carcinoma in situ of the cervix, from pathologic, diagnostic, clinical and therapeutic considerations, represents the embodiment of a number of relatively new concepts formulated in the last decade or so and only currently being validated by certain sophisticated techniques. Some of these concepts could not have been justifiably advanced ten years ago. Significantly, the major thrust in the conquest of cervical cancer is not with the gynecologic oncologist in a cancer center setting but rather with the obstetrician-gynecologist, the family practitioner, and the generalist who see many patients on a day-to-day basis. These same physicians are challenged to find means to extend their abilities beyond the relatively few patients now being routinely screened to the other two-thirds of the American population who, for both social and economic reasons, do not reap the benefit of cervical cytology. Indeed, the major thrust must be made here, for epidemiologic data suggest that

this silent majority, more than the minority in our offices, represents the truly at risk population for cervix cancer. The spectrum of cytologic and histologic changes from normal cervical epithelium, dysplasia, carcinoma in situ, and invasive cancer are illustrated in Figures 1–8.

EPIDEMIOLOGY

A large body of data has accumulated regarding patient populations with high and low rates of cervical cancer. Although these data do not imply precise causative factors, they do alert the practitioner to certain patient populations that justify greater or lesser cytologic surveillance. Reported low-risk populations include nuns and women in other religious orders, Jewish women, and country women. Reported high-incidence groups in this country include Negroes as well as Puerto Rican, Mexican, and other immigrant populations. Included are also women of low socioeconomic status, early age at first marriage, and early age at first coitus; women of high parity, divorced, and separated women, prostitutes, those with a background of emotional unhappiness and depression; and, more recently, women with Herpes virus type 2 infection of the genital system.

The relationship of HSV-2 to cervical neoplasia has attracted considerable interest in recent years. The association of herpesvirus and animal oncogenesis with tumor systems in frogs, chickens, and monkeys provided some of the basic data. Currently HSV-2 appears to be the causative agent in infectious mononucleosis, and, from a variety of immunologic studies, related at least as a cofactor to Burkitt's lymphoma and perhaps nasopharyngeal carcinoma. Herpes simplex virus type 1 (oral, buccal mucosa, lip), and herpes simplex virus type 2

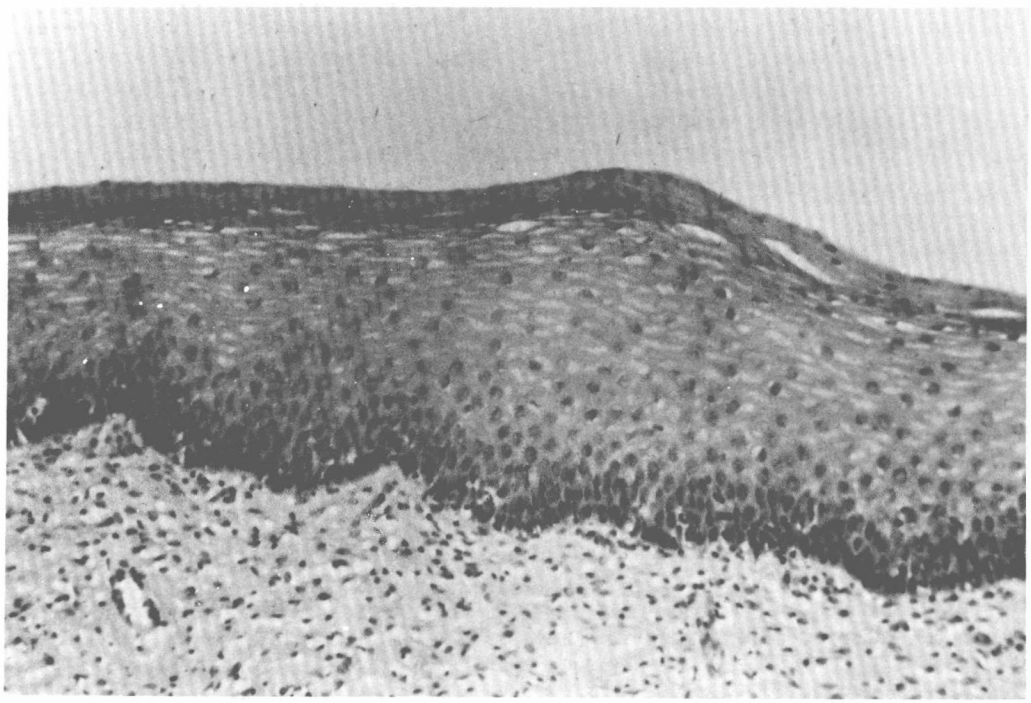

Figure 1 Biopsy of normal stratified squamous epithelium.

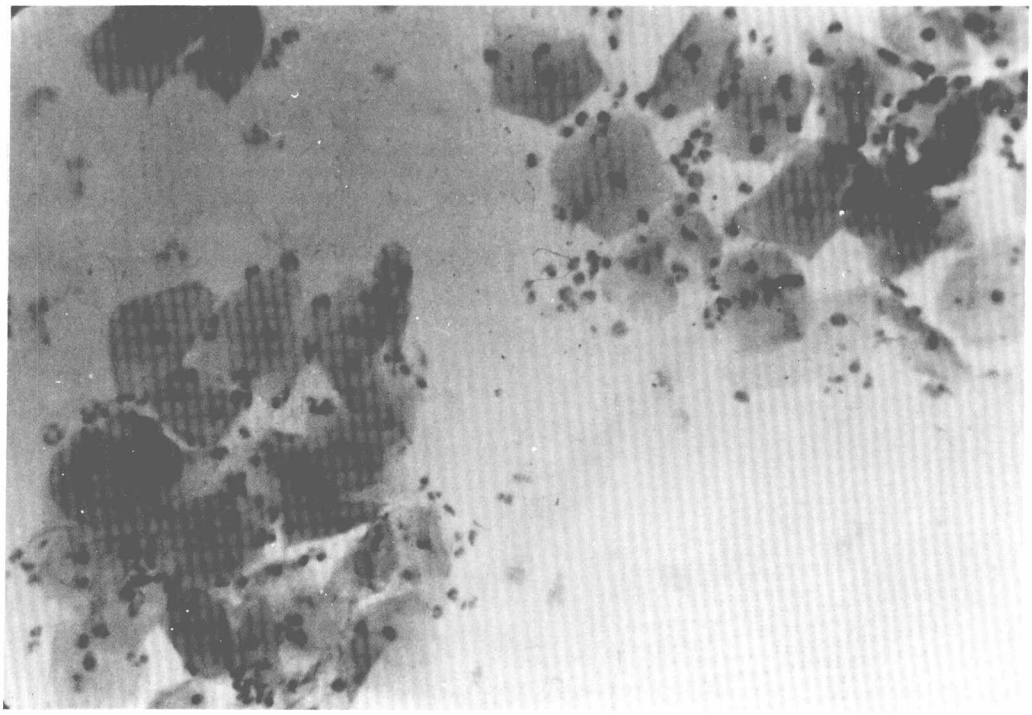

Figure 2 Pap smear of normal cervix with normal nuclear and cytoplasmic features.

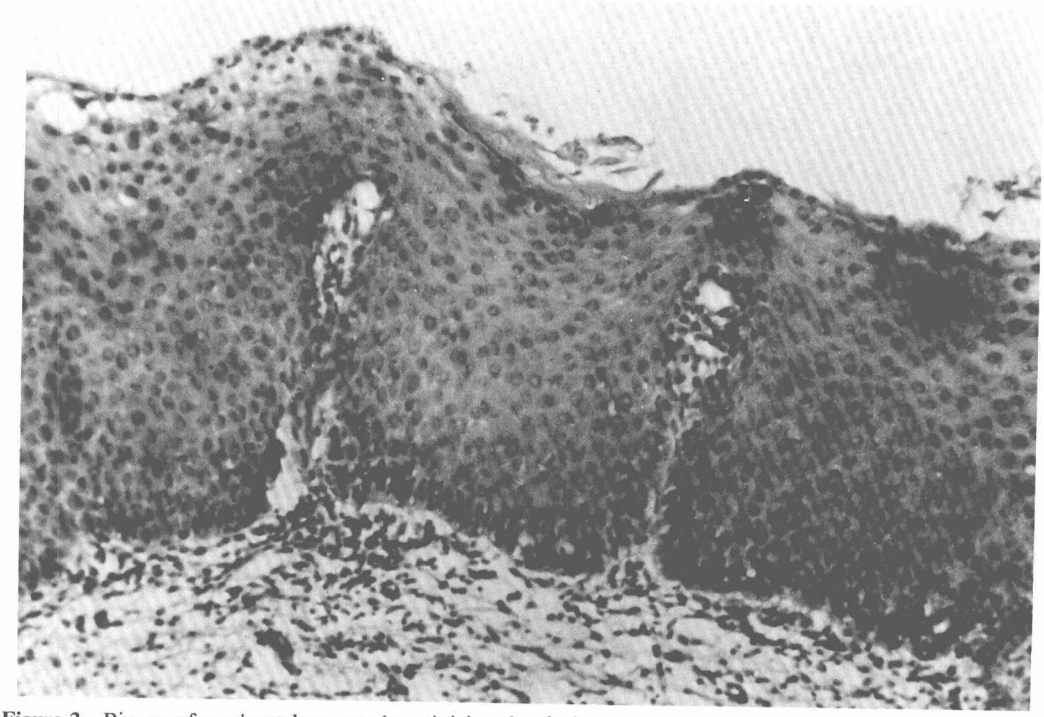

Figure 3 Biopsy of moderately severe keratinizing dysplasia.

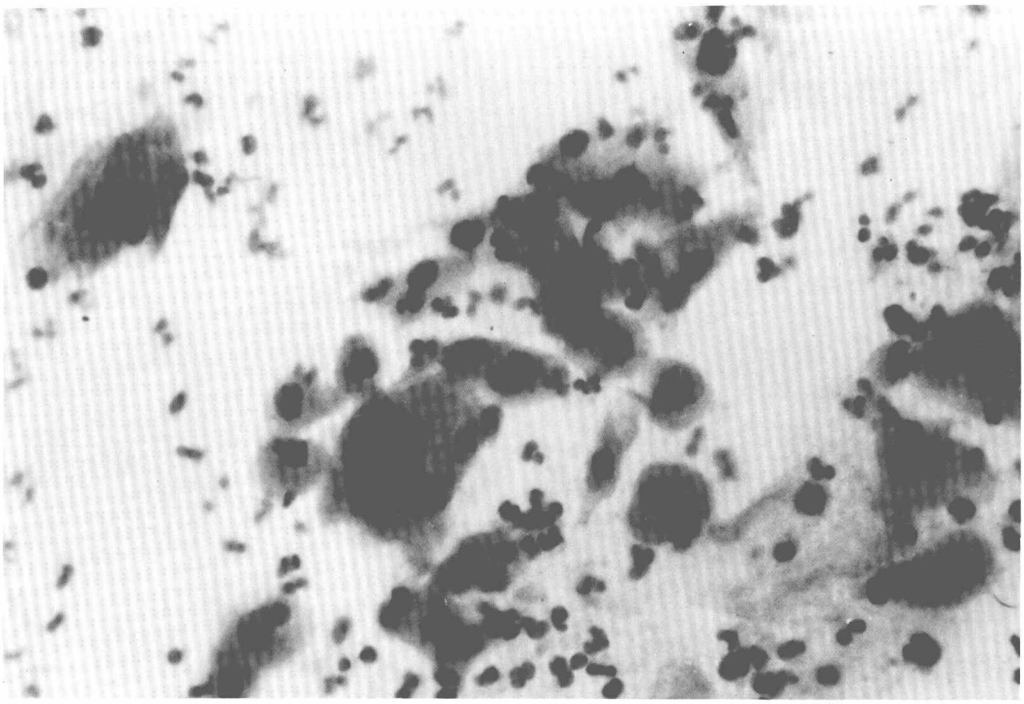

Figure 4 Pap smear with nuclear changes characteristic of moderate keratinizing dysplasia.

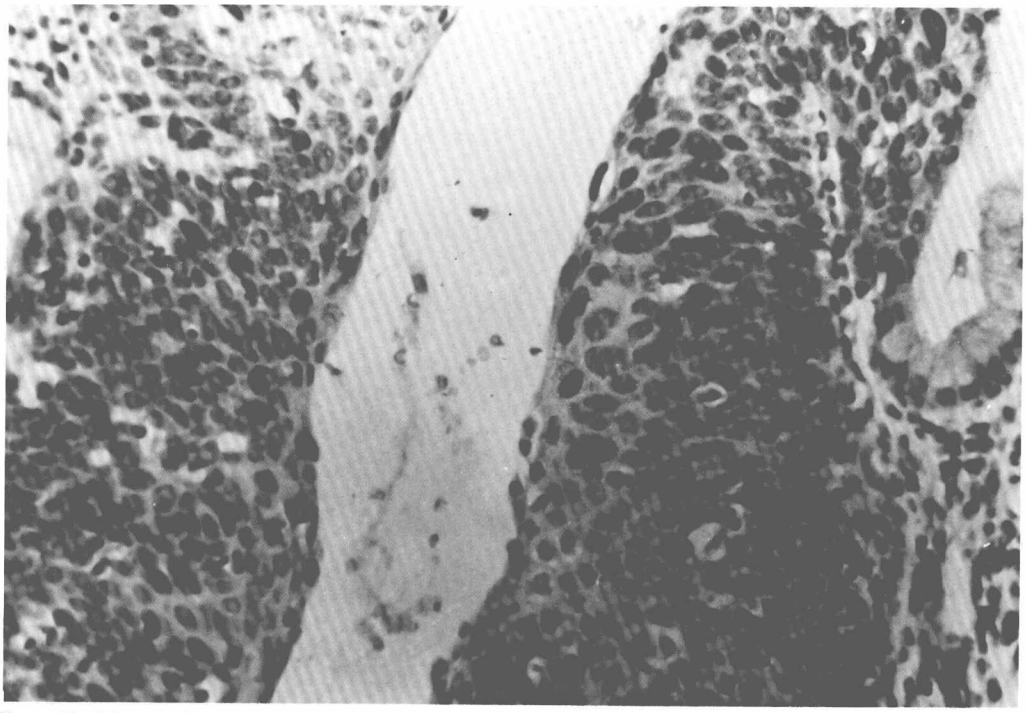

Figure 5 Biopsy of carcinoma in situ with full thickness atypia.

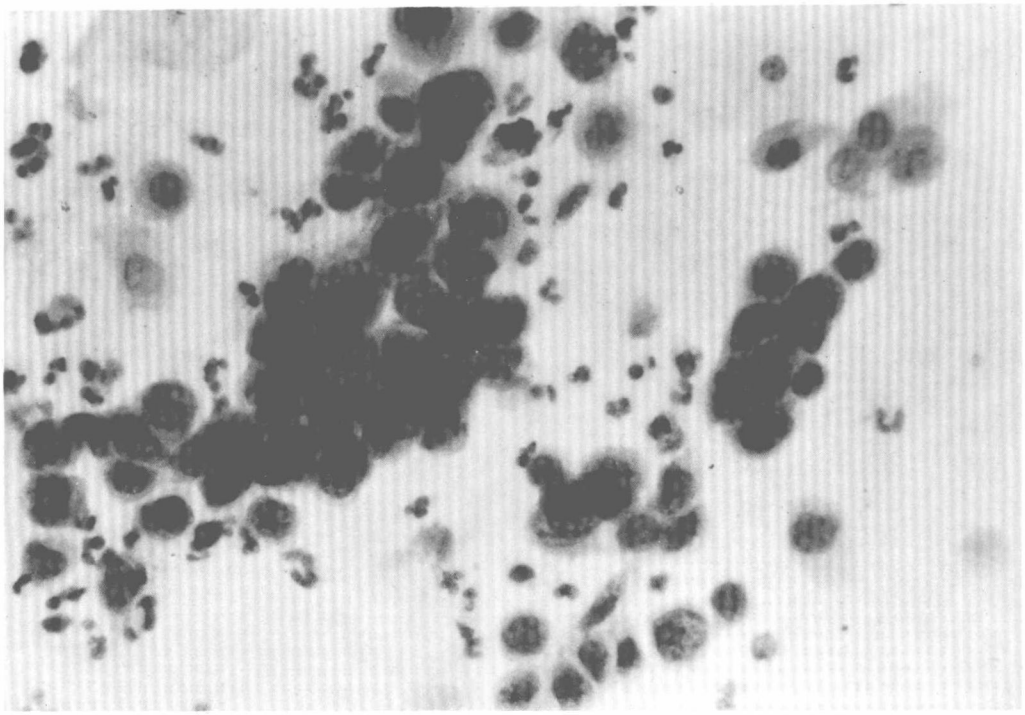

Figure 6 Pap smear of carcinoma in situ. Note characteristic syncytial arrangement, with "third type" cells (nuclear atypia, but retention of thin cytoplasmic rim). Note "clean" background.

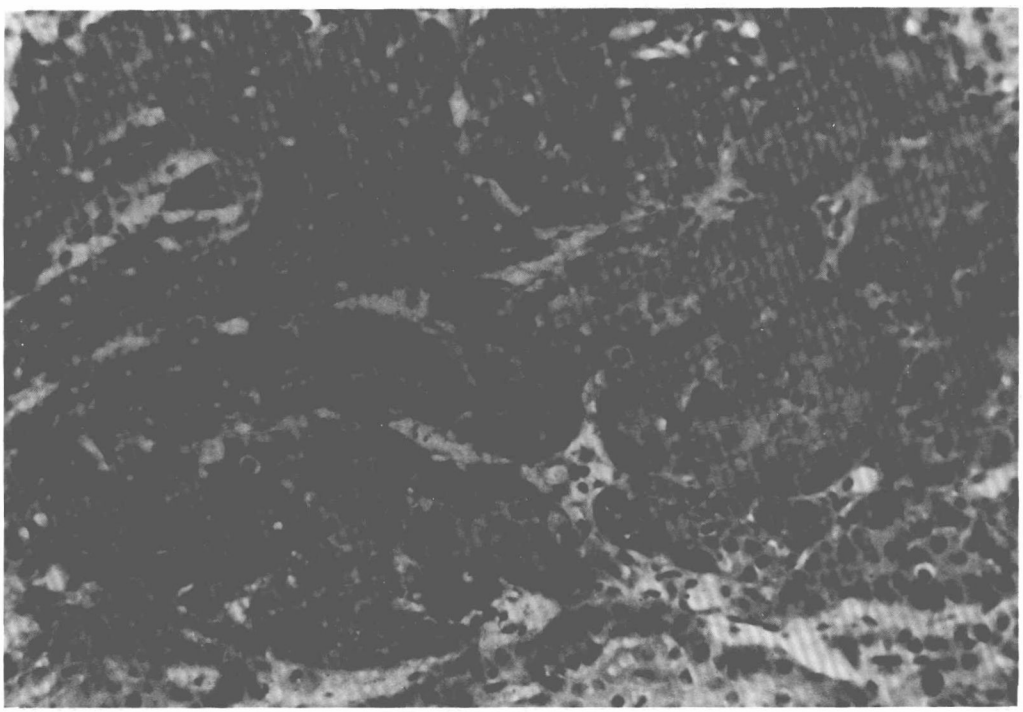

Figure 7 Biopsy of invasive squamous carcinoma of cervix, predominantly nonkeratinizing large cell type.