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Control of Endometrial Cancer

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Epidemiologic studies of this disease may offer etiologic clues and help us recognize high-risk factors. Of special interest in this respect is the infrequency of endometrial cancer in Asian women and the increase in its incidence in migrants to Western countries.

The definition of high-risk factors in the perimenopausal years and the possibility of screening them by ambulatory aspiration curettage could offer the possibility of prophylactic measures that could interrupt the progression to invasive cancer. The recognition of endometrial cancer precursors, especially adenomatous hyperplasia, is critical in such surveillance and can lead to control in the same manner that the diagnosis of cervix cancer precursors has contributed to the steady decline in mortality from that disease.

Modern steroid metabolic technology has enabled us to gain significant insights into the problems of hormone sensitivity of endometrial cancer and offers promise of allowing us to make real therapeutic advances in this area. The recognition of adrenal androstenedione as the postmenopausal estrogen precursor and the techniques of quantifying estradiol receptor sites in target cells will be very important in these studies.

The Diagnosis and Management of Cervical Intraepithelial Neoplasia

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Carcinoma of the uterine cervix continues to be a major health problem to the women of this country. In order to reduce the morbidity and mortality from this preventable problem, it is important that we develop and utilize effective techniques of early diagnosis and treatment of the disease in its intraepithelial stage.

For more than two decades the Papanicolaou cytosmear technique has been available to clinicians as a screening test for cervical neoplasia. For many years the indicated follow-up evaluation of abnormal Papanicolaou smears suggesting cervical neoplasia was to perform a cold-knife conization biopsy of the cervix of these patients with abnormal cytosmears. With the increasing acceptance in recent years of the colposcope as an adjunctive diagnostic tool, it is now possible for most clinicians to perform, or have performed on their patients with abnormal cervical cytosmears, a thorough colposcopic examination of the cervix and vagina and to obtain directed biopsies from areas of abnormality as indicated by direct, magnified vision. Examination of the endocervical canal by direct vision so far as possible and by endocervical curettage in each case are important procedures in the proper evaluation of these patients. By these careful adjunctive diagnostic techniques, it is possible to definitively diagnose the degree and extent of virtually all cervical intraepithelial neoplastic processes.

In the absence of neoplastic changes in the endocervical curettings, those patients with biopsy diagnosis of varying grades of intraepithelial neoplasia are then managed according to the age of the patient and the severity of the dysplastic process. The patients with mild or moderate dysplastic changes are treated with cervical cryotherapy using either freon or nitrous oxide delivered by any of several currently available and acceptable machines. Upwards of 90% of these early dysplastic changes can be reversed or eradicated by this technique. For those patients with more advanced grades of dysplasia or carcinoma in situ, management should take into consideration their reproductive interests. Those who have no further desire for pregnancy may be managed by hysterectomy with preservation of normal ovaries. If conservation of childbearing capability is desired, then treatment with cryotherapy or therapeutic cold-knife conization followed by careful cytologic and colposcopic evaluation is in order. The pregnant patient with cervical intraepithelial neoplasia may be managed with careful colposcopic delineation of the magnitude and extent of the neoplastic lesion, visualization of 360° of normal endocervical epithelium, and assurance that the biopsy was taken from the most abnormal area of the cervix. The pregnancy may then be maintained without

further therapy or diagnostic efforts, vaginal delivery accomplished, and then careful follow-up and definitive management in the postpartum period carried out.

For those patients with endocervical curettings containing evidence of dysplasia or carcinoma in situ and/or with cervical biopsies reported as invasive carcinoma, definitive management appropriate to the patient and the staging is then carried out *without* conization. For those patients with evidence of dysplasia or carcinoma in situ in the endocervical curettings but with the biopsy diagnosis of cervical intraepithelial neoplasia, and those patients in whom endocervical curettings could not be obtained, a cold-knife conization is indicated. This may then be followed immediately after definitive diagnosis, either the same day or within 48 hours, by definitive management as indicated by the stage of the neoplastic disease.

Many techniques have been used over the years for the treatment of cervical intraepithelial neoplastic processes. These include the use of varying degrees of surgical excision, radiation therapy, ultrasound, and extremes of temperature by either cauterization or freezing techniques. In recent months, the use of the Carbon Dioxide Surgical Laser has come under investigation as a possible means of colposcopically directed, precise, laser surgical excision of the areas of cervical epithelial abnormality. This technique offers considerable promise, and the preliminary studies are being prepared for presentation in the near future.

The effectiveness of these forms of management, as briefly discussed above, are dependent upon the cooperativeness of the patient to obtain periodic health evaluations, the alertness and willingness of clinicians to obtain at least annual cervical cytosmears on their female patients, and the increasing availability of the trained colposcopist to define and refine the adjunctive diagnostic techniques and precise management that more appropriately fit the patient's needs as dictated by the degree of her neoplastic process.