

The international debate on Hormonal pathology of the endometrium and endometrial neoplasia

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The endometrial tissue is exquisitely sensitive to steroid sex hormones and able to modify structures and functions with promptness and versatility. Hormonal-induced changes occur physiologically during menstrual cycles and menopause and pathologically may result in dysfunctional fertility and abnormal growth ranging from hyperplasia to carcinoma. Hormone therapy is used by women of all ages, including oral contraceptives and ovulation stimulation for premenopausal women, hormone replacement therapy for postmenopausal women and adjuvant therapy for breast and uterine cancer. The most commonly used hormones are Estrogen (E) and Progesterone (P), normally present and responsible for reproductive functions in premenopausal women. Prolonged and unopposed E may result in abnormal proliferation and neoplasms often seen in patients with metabolic abnormalities (obesity, diabetes) and polycystic ovarian disease that can be reverted with hormonal therapy. Endometrial cancer (EC), the most common gynecologic cancer in the USA and in most industrialized countries associated with hyperestrogenism, Type I, has often a better outlook than "independent" (from hormones), Type II EC seen in older postmenopausal patients: this was seen in studies of E and P Receptor studies correlated with the degree of severity of the EC. Tamoxifen a non-steroidal synthetic triethylene estrogen derivative is successfully used in Breast Cancer due to its antiestrogenic

effect on breast tissue; on the Endometrium it can have an agonist estrogen effect in elderly patients who may develop polyps and cancer as shown by this author and team in the largest series (700 cases) published. While hormonal effect is the most common known etiologic factor in EC a possible cofactor has been recently been demonstrated by this team: Human Mammary Tumor Virus (HMTV) identified in 23,3 % of EC containing env gene sequences absent in all control benign endometrial tissue.

Biography

Liane Deligdisch has graduated from the Carol Davila University of Medicine and Pharmacy, Romania and is trained in Obstetrics-Gynecology and Pathology in Israel. She was a Resident in Pathology at the Boston Free Hospital for Women (Harvard Medical School), Visiting Professor at Magee Women's Hospital, Pittsburgh and was a Fellow in Perinatal Pathology at the Mount Sinai School of Medicine, New York. Currently, she is a Professor of Pathology and Obstetrics-Gynecology at the Mount Sinai School of Medicine, New York, USA. She founded the Division of Gynecologic Pathology and the Course of Gynecologic Pathology at the Mount Sinai School of Medicine. She is a Member of the French National Academy of Medicine, has authored 145 articles in peer-reviewed journals and has also edited 7 textbooks.