Fluctuation of Endometrial Prostaglandins Levels in Normal Menstrual Cycles

Mei-ling Han, Ren-jie Zhang, You-fang Wang
Department of Gynecology and Obstetrics, Peking Union Medical College, Peking, China

Endometrial prostaglandin (PGF2α and PGE2) levels were estimated by radioimmunoassay in 30 normal women at various days of the menstrual cycle. There were 2 distinct peaks at ovulatory and late secretory phases, beside the highest level during the period. They keep extremely close pace with the fluctuation of estrogen and progesterone concentrations seen in text books.

Estimation of PGF2α M in Patients with Endometriosis

Mei-ling Han et al.
Department of Gynecology and Obstetrics, Peking Union Medical College, Peking, China

Blood serum and peritoneal fluid 13,14-dihydro-15-keto-prostaglandin F2α (PFG2α M) was studied in 38 cases of endometriosis, 13 nonendometriosis patients and 55 normal women. The clinical value of measuring peritoneal fluid PGF2α M lies in the fact that its high level indicates the possibility of endometriosis, though the examination is not specific as CPID and ovarian tumors also excite a rise of PGF2α M. Plasma PGF2α M levels run parallel with those of peritoneal fluid. It is the method of choice for collecting specimens because it is easier and less harmful as compared to aspiration of peritoneal fluid by laparoscopy.

Estimation of PGF2α and PGE2 in Ectopic Endometriotic Nodules and Endometrium in situ in Patients with Endometriosis

Mei-ling Han, Ren-jie Zhang
Department of Gynecology and Obstetrics, Peking Union Medical College, Peking, China

Prostaglandins (PG) in ectopic endometriotic nodules and endometrium in situ were estimated in 16 patients with endometriosis. The PGF2α and PGE2 in ectopic endometrium were definitely higher than the endometrium in situ and normal peritoneal or ovarian tissue in the same patients. The degree of dysmenorrhea was closely related to the
contents of PG in ectopic endometrium but not to endometrium in situ, and the high PG level in the intra-abdominal endometriotic nodules may be one of causes of reduced reproductive function. Their mechanisms were discussed.