

**P-8** Transforming Growth Factor- $\beta$  (TGF- $\beta$ ) Expression  
is Mediated by Epithelial-stromal Interaction  
in Human Endometrium

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**Objectives:** To ascertain the effect of epithelial-stromal interaction on TGF- $\beta$  expression in human endometrium.

**Design:** Comparative study between 3-dimensionally co-cultured human endometrial cells and stromal/epithelial separated cultured cells in progesterone or estrogen dominant condition.

**Methods:** Reverse transcriptase-polymerase chain reaction (RT-PCR) and immunohistochemical study.

**Patients:** Gynecological surgery patients.

**Results:** TGF- $\beta$ 1 expressed in co-cultured epithelial cells in progesterone dominant milieu. TGF- $\beta$ 1 continuously expressed in co-cultured stromal cells regardless hormone conditions. But, separated cultured stromal and epithelial cells showed no TGF-beta expression in all experimental conditions.

**Conclusion:** Progesterone regulates TGF-beta expression through cell to cell communications between epithelial cells and stromal cells in human endometrium.

**P-9** Effects of Xenoestrogens on Proliferation and Expression of  
Steroid/Growth Factor Receptor of Human Endometrial Cells

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**Objective:** To investigate the impacts of xenoestrogens on human endometrial epithelial cell in primary culture system.

**Materials and Methods:** Uterus was obtained by fertile, unexposed women undergoing hysterectomy for uterine myoma. The impacts of BPA or PCB (Aroclor 1254) were investigated in examination of cell proliferation and steroid/growth factor receptors expression on human endometrial epithelial cell in primary culture system. HUEC were cultured with  $10^{-4}$ ,  $10^{-5}$ ,  $10^{-6}$ ,  $10^{-7}$ ,  $10^{-8}$ ,  $10^{-9}$  mM bisphenol A (BPA) and evaluated at 24-h intervals for their survival rates. HUEC were also cultured with 1, 0.2, 0.02  $\mu$ g/ml polychlorinated biphenyl (PCB).

**Results:** At less than  $10^{-5}$  mM in low concentration, cells were not affected by BPA for cell development