I S—19 IMMUNOHISTOCHEMICAL STUDY FOR THE STRUCTURAL PROTEINS OF MEMBRANE AND CATHEPSIN -D IN NORMAL AND NEOPLASTIC ENDOMETRIUM

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[Purpose] Immunohistochemical studies were performed on laminin(L), type-IV collagen(C) and cathepsin-D(C-D) in endometrial adeno-carcinomas to relate the localization of basement membrane components to tumor invasion and metastasis. [Materials & Methods] Fresh frozen sections of 8 normal endometrias (3 proliferative and 5 secretory) and 14 endometrial adenocarcinomas were investigated at this study by immunohistochemical stainings, using monoclonal anti-human C and polyclonal anti-human L and C-D antibodies. The sections were fixed by 3.7% formaldehyde and digested by 0.02% trypsin before the incubation of primary antibodies. [Results] A proliferative and secretory endometrium was positive for C-D staining. Positive staining of L and C were found on basement membrane (BM) in normal endometrial glands and endothelial cells of vessels. In carcinoma cases, L and C stainings were found on BM with irregular and uncontinuous fashion. Strong and diffuse stainings for L and C were observed in solid area of adenocarcinoma. Nine of 11 endometrial adenocarcinomas were positive for C-D staining. The intensity of C-D stainings were relatively corelated to histopathological grading of endometrial carcinoma. [Conclusion] The interaction for the structual proteins such as C and L to the expression of C-D highly corelate to the evidence of invasion for endometrial cancer.

I S—20 IMMUNOHISTOCHEMICAL STUDY FOR EGFR, IGF-1R, C-ERBB-2 AND P53 IN NORMAL AND NEOPLASTIC ENDOMETRIUM

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[Purpose] The expressions of epidermal growth factor receptor(EGFR), insulin-like growth factor-1 receptor(IGF-1R) and c-erbB-2(erbB) and p53 oncogene products were investigated in normal and neoplastic endometrium which consider to possibly relate the growth of the endometrial carcinomas. [Materials & Methods] Fresh frozen tissues for 14 normal endo-metrias and 23 endometrial carcinomas and 8 cell lines cultured in Lab-tek chamber were examined at this study by immunohistochemical methods using the monoclonal antibodies. [Results] The positive stainings of EGF-R were found in carcinoma tissues and cell lines 2/23, 7/8 and IGF-1R were 2/23, 1/8, respectively. But no staining of EGFR, IGF-1R was observed in normal endometrium. Four normal endometrias, 18 carcinomas and all cell lines expressed erbB oncogene products. The endometrial adenocarcinoma showed stronger intensity of erbB stainings than normal and hyperplastic endometrias. Also in both group 1(with hyperplastic lesion) and group 2 (without hyperplastic lesion) endometrial carcinomas, the intensity of erbB stainings were strongest in carcer lesions rather than others included normal endometrias. The p53 oncogene products were found in a carcinoma and 5 cell lines. [Conclusion] These suggest that EGFR, IGF-1R and erbB probably play a role in the cellular proliferations of endometrial carcinoma.