I S－47 Telomerase activity apoptosis and cell cycle analysis of gynecologic cancer cells treated with Taxol

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[Objective] The aim of this study was to analyzed telomerase activity (TA) and apoptosis (AP) in cell cycle phases in endometrial (IK) and ovarian (KF) cancer cells in vitro treated with Taxol (TAX). [Methods] Ik and KF were administered 1 μMTAX for 24 hours. Adherent (AD) cells and floating (FL) cells were assessed by Telomeric Repeat Amplification Protocol (TRAP), in situ TRAP, cell cycle and apoptotic changes after 24 hours TAX exposure. TA was assessed by TRAP and by in situ TRAP assay in cell by cell basis. Cell cycle changes were analysed using flow cytometry and compared to apoptotic changes. [Results] AP were identified in many cells of IK more than KF after 24 hours TAX exposure. AD cells contained two types of cells. One revealed nuclei fragmentation, the other did not. Fl cells showed typical apoptotic changes which contained apoptic bodies. Almost AD cells accumulated at G2+M phase and FL cells accumulated low DNA area. TA was observed each cell cycle phases in control cells as same as in AD cells, however FL cells lost TA after 24 hours TAX exposure by TRAP and in situ TRAP assay. [Conclusion] AP identified remarkably in IK cells more than KF after 24 hours TAX exposure. AD cells contained viable cells which retained TA after 24 hours TAX exposure.

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Synchronous primary carcinomas of the endometrium and ovary

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Objectives: Synchronous carcinomas of the endometrium and ovary may indicate either independently developing neoplasms or metastatic disease. The clinical implications and prognosis of these two categories are quite different. The objectives of this study were to identify and evaluate the empirical criteria and significant therapeutic implications.

Method: The National Taiwan University Hospital Cancer Registry records and pathological reports from 1977 to 1994 were reviewed. Empirical criteria were used to identify synchronous primary cancers.

Results: A total of 322 patients had endometrial cancer and 421 patients had ovarian cancer in our Cancer Registry records. Eleven patents had simultaneous cancer involvement of both the endometrium and ovary. Six cases fulfilled the criteria of synchronous primary carcinomas of the endometrium and ovary. Of these, five were alive and free of disease for 35-144 months (median 94.2 months). The disease-free survival rates between patients with synchronous primary and metastatic cancers of different histologic types showed a statistically significant difference (P=0.013). No statistical significance was noted for different histologic types (P>0.5).

Conclusions: The empirical criteria used here were useful in identifying synchronous primary cancers of the endometrium and ovary. The favorable clinical outcome may relate to early detection of early-stage disease and low-grade malignancy with an indolent growth rate. Surgical management with or without adjuvant therapy has a satisfactory outcome in our experience.