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Proliferation Cell Nuclear Antigen -
Prognostic factor in ovarian cancer.

UN DONG PARK, M.D. S. H. SHIN, M.D.
Department of OBS. & GYN. Kosin Medical
College & Medical Center. Busan, Korea

We determined the proliferating cell nuclear antigen-labelling index (PCNA-LI) in 35 cases of common epithelial ovarian cancer by immunohistochemical staining.

Then, we analyzed the relationship between PCNA labelling index and clinical stage, histological grade and survival.

In 23 patients of grade I tumor, the mean value of PCNA-LI was 39% and in 8 patients of grade II tumor and in 4 patients of grade III tumor, the mean value of PCNA-LI was 52% and 79%, respectively ($P=0.013$).

In 15 cases of stage I (FIGO), the mean value of PCNA-LI was 33.7%, and in 5 cases of stage II (FIGO), in 8 cases of stage III (FIGO) and in 7 cases of stage IV (FIGO), the mean value of PCNA-LI was 50%, 51.8% and 64.4%, respectively ($P=0.013$).

The median value of PCNA-LI was 46.7%.

For patients with a tumor LI greater than the median, the estimated 3-year survival was 50%; for patients with a tumor LI below the median, the estimated 3-year survival was 87.5% ($P < 0.05$).

Large studies of patient with advanced-stage disease are need, however, PCNA stainint seemed to be of prognostic value and may be used for the identification of high-risk patient.

I S—46 **Significance of interleukin-2 (IL-2), interleukin-6 (IL-6), and tumor necrosis factor- α (TNF- α) in the ascites of ovarian cancer**

H. Moon, K.T. Kim, Y.O. Kim, Y.Y. Hwang

*Department of Obstetrics and Gynecology,
School of Medicine, Hanyang University,
Seoul, KOREA 133-792*

The levels of cytokines (IL-2, IL-6, and TNF- α) were checked in the ascites of 23 patients with ovarian cancer in this study. These levels were then compared with those found in ascites of 10 control subjects and the relation between levels of cytokines and clinical parameters was studied.

ELISA were used to determine the levels of cytokines in ascites.

The levels of IL-2 and TNF- α were not elevated. (IL-2: 30.5 vs 37.2 pg/ml, $p=0.083$, TNF- α : 91.0 \pm 20.7 vs 440.2 \pm 117.9 pg/ml, $p=0.058$) Significantly higher IL-6 level were detected in ovarian cancer patients' ascites. (354.3 \pm 42.9 vs 5,605 \pm 1,137 pg/ml, $p=0.006$) Levels of cytokines did not correlate with tumor volume, histologic type, drug response or patient survival. Circulating platelet counts in patients with ovarian cancer were significantly higher than that of control subjects. (282.6 \pm 5 vs 388.4 \pm 21.2 $\times 10^9/l$, $p=0.003$). Thrombocytosis (platelet counts $> 400 \times 10^9/l$) was found in 35%(8/23) of patients with ovarian cancer and IL-6 levels in ascites correlated significantly with circulating platelet counts ($R=0.427$, $p=0.042$).

This observation suggest that IL-6 may have a role in the development of tumor-associated thrombocytosis and angiogenesis. A larger study would help in evaluating the potential biological roles of cytokines in ovarian cancer ascites.