8021 POSTER

The effect of anemia on the progression-free survival in epithelial ovarian cancer (stage II-IV) patients treated with paclitaxel-carboplatin combination therapy: a retrospective analysis of the JGOG3016 trial of the Japanese Gynecologic Oncology Group (JGOG3016-A)

T. Sugiyama[1], S. Kumagai[1], T. Shouji[1], H. Michimae[2], N. Katsumata[3], H. Tsuda[4], D. Aoki[4], F. Terauchi[5], T. Jobo[6], M. Yasuda[7]. *[1]Iwate Medical University School of Medicine, Department of Obstetrics and Gynecology, Iwate, Japan; [2]Kitasato University School of Pharmacy, Department of Clinical Medicine Devision of Biostatistics, Tokyo, Japan; [3]National Cancer Center Hospital, Department of Medical Oncology, Tokyo, Japan; [4]Keio University School of Medicine, Department of Obstetrics and Gynecology, Tokyo, Japan; [5]Tokyo Medical University School of Medicine, Department of Obstetrics and Gynecology, Tokyo, Japan; [6]Social Insurance sagamino Hospital, Department of Obstetrics and Gynecology, Kanagawa, Japan; [7]Jikei University School of Medicine, Department of Obstetrics and Gynecology, Tokyo, Japan*

Background: We conducted the randomized phase III study of conventional paclitaxel-carboplatin combination therapy (c-TC) and weekly dose dense TC (dd-TC), and the advantage of dd-TC on PFS was reported at the 2008 ASCO Annual Meeting (JGOG3016). We investigated the effect of anemia on PFS, with focus attention on “anemia”, which was frequently observed in the dd-TC group as the major adverse event.
Methods: Among the patients who were enrolled in JGOG3016 and treated at least one cycle or more, the development of anemia before and after the treatment was retrospectively investigated. A patient with 8 g/dL of hemoglobin (Hb) or less (Grade 3 or more: CTCAE) was classified into the anemia group and background factors affecting the development of anemia were investigated. Furthermore, the anemia and non-anemia groups were matched by Caliper method, and the effect of anemia developing after the beginning of treatment on PFS was investigated after the background factors of “weight”, “age”, “PS” and “residual tumor” were adjusted. The patients “histological type”, “stage” and “surgical history” were also adjusted in the background factors.
Results: Total 622 patients (c-TC group: 314, dd-TC group: 308) were investigated and anemia of Grade 2 or more was found in 123 (19.8%) patients before the treatment. Anemia of Grade 3 or more was observed in 137 (43.6%) patients of the c-TC group and 211 (68.5%) patients of the dd-TC group after the treatment. In comparison after adjusting background factors by matching, the median PFS was 519 days in the anemia group (Grade 3 or more after the treatment) and 460 days in the non-anemia group of the c-TC group ($p = 0.5513$), on the other hand, 777 days in the anemia group and 1,100 days in the non-anemia group of the dd-TC group ($p = 0.3493$).
Conclusions: The results of this study showed the actual condition of anemia in ovarian cancer patients treated with standard TC therapy, and suggested the possibility that the development of anemia affected PFS. In particular, weekly dd-TC therapy is expected to further improve the outcomes when the anemia is corrected. A prospective study should be performed to investigate whether PFS is substantially improved by preventing severe anemia with ESAs.

8022 POSTER

Prognostic factors and survival analysis in pre- and postmenopausal patients with epithelial ovarian cancer

S. Xu[1], X. Zhu[1], C. Zhu[1], J. Xie[1]. *[1]Zhejiang Cancer Hospital, Research Institute, Hangzhou, China*

Background: Prognostic factors for epithelial ovarian cancer may differ between pre- and postmenopausal pateints. To discuss the difference, authors conducted a retrospective analysis to elucidate the impact of clinic pathological factors, cytokines, CA125 and immunological status on survival in pre- and postmenopausal epithelial ovarian cancer.
Material and Methods: The study included 55 pre-menopausal and 55 postmenopausal patients with epithelial ovarian cancer treated with cytoreductive surgery followed by platinum-based chemotherapy in Zhejiang Cancer Hospital from 2003 to 2005. Flow cytometry was employed to detect serum cytokines, IFN-γ, TNF-α, IL-2, IL-4, IL-5, IL-10 and lymphocyte subset, CD3, CD4, CD8, CD19, CD25, CD56, CD44, for evaluating immunological status. Micropartical enzyme immunoassay was used to measure serum CA125. Pearson chi test was used in univariate analyses and a multivariable proportional hazard model was applied to assess the prognostic significance of the different covariates.
Results: No significant difference of clinicopathological factors, serum cytokines, immunological status and serum CA125 was found between pre-menopausal and postmenopausal women with epithelial ovarian cancer. However, 3-year overall survival rate in postmenopausal women with epithelial ovarian cancer was less than that in premenopausal patients(29% vs 56%, $P < 0.01$). Bilateral ovarian cancer and high CA125 level were significantly associated with worse overall survival compared to one side ovarian cancer and low CA125 level in both pre- and postmenopausal patients. Additionally, menarcheal age, abortion times, tumor stage, CD4, CD8, CD56, CD25, CD44 levels were significantly correlated to overall survival of pre-menopausal women with ovarian cancer.
Conclusions: Bilateral ovarian cancer and high CA125 level are independent unfavorable prognostic factors in both pre- and postmenopausal patients with ovarian cancer. Immunological status may affect overall survival of pre-menopausal patients with ovarian cancer.

8023 POSTER

Platinum-sensitive relapsed epithelial ovarian cancer: how much does the treatment-free interval matter?

M. Milovic[1], L.J. Stamatovic[1], S. Vasovic[1], A. Karaferic[1], S. Jelic[1]. *[1]Institute of Oncology and Radiology Serbia, Department of Medical Oncology, Belgrade, Serbia*

Background: While platinum resistant/refractory ovarian cancer generally exert an extensive chemoresistance containing almost against all available cytostatic agents, platinum containing regimens can be readministered to patients with platinum-sensitive disease, with different efficacy mainly depending on the interval from the end of previous platinum-based chemotherapy (TFI).
Patients and Methods: Patients with measurable, platinum-sensitive recurrent epithelial ovarian carcinoma were eligible. Platinum sensitivity was defined as follows: patients with disease that relapsed 6−12 months after completion of a platinum-based regimen were considered partially platinum-sensitive, and those patients who relapsed after 12 months from the end of a previous regimen were considered pure platinum-sensitive patients. All patients FIGO IIB-IV were primarily treated with cytoreductive surgery followed by paclitaxel-carboplatin chemotherapy and the same chemotherapy regimen was applied as second-line treatment after disease reccured. RECIST criteria and CTCAE V3.0 were used to monitor therapy response and toxicity.
Results: Overall thirty-nine patients were evaluated for efficacy and toxicity, out of which 36% had partially and 64% pure sensitive relapsed ovarian cancer. Fifteen (38%) patients had a complete response, seven (18%) had a partial response, one (3%) had stable disease and sixteen (41%) experienced progressive disease. Overall RR (ORR) was 12.8% in partially platinum-sensitive disease and 44% in pure platinum-sensitive disease, indicating a tendency for better ORR with readministration of the same chemotherapy regimen in the pure platinum-sensitive in comparison with partially platinum-sensitive group; $p = 0.051$, chi-squared test. No statistically significant difference was observed between partially and pure platinum-sensitive patients regarding median TTP (20 vs. 17 months respectively; $P = 0.508$). Four patients experienced G4 leukoneutropenia, and 4 patients had G2 peripheral neuropathy.
Conclusion: Our results, in terms of ORR support the use of the same platinum-based regimen only in those patients relapsing after 12 months from the end of previously delivered platinum chemotherapy regimen. Thus, these data clearly indicate that appropriate selecton of chemotherapy regimen in treatment of relapsed ovarian cancer predominantly depends of response duration on primary treatment.

8024 POSTER

Comparison of tumour size and metastases in stage I and III primary epithelial ovarian cancer

E. Petru[1], E. Sampl[1], J. Haas[1], C. Benedicic[1], R. Winter[1]. *[1]Medical University of Graz, OB/GYN, Graz, Austria*

Background: Two small studies have found larger primary ovarian carcinomas in stage I as compared to stage III disease. Thus, these stages may represent different entities.
Methods: We retrospectively analyzed the charts from 553 patients (stage I: $n = 177$; stage III: $n = 376$) operated on at the Dept. OB/GYN of the Medical University of Graz between 1980 and 2008 because of epithelial ovarian cancer. Macroscopic, microscopic histopathological and surgical reports were analyzed.
Results: Primary lesions were significantly larger in stage I disease as compared to stage III disease. No such association was found when invasive components only were analyzed. The size of the invasive primary tumor was not associated with the largest size of the intraperitoneal metastasis. The invasive tumour size of the primary was neither predictive for survival in stage I nor in stage III disease, respectively. Larger metastases were associated with ascites, bowel involvement, tumour residuals > 2 cm and an inferior prognosis. Lymphadenectomy was more prevalent in cases with smaller intraperitoneal metastases.