CA125. CT scan results were generally concordant with CA125 status. No relationship was seen between clinical benefit and HLA type.
Conclusions: Study treatment was well tolerated. There was clear evidence of clinical benefit for some pts, including pts who were heavily pre-treated. This DC-MFP approach warrants further study in patients ovarian carcinoma.
Supported by grants from PrimaBiomed Ltd.

References

[1] Loveland et al. Clin Cancer Res 2006; 12: 869.

5013 POSTER

Squamous cell carcinoma antigen level as a prognostic factor for uterine cervical carcinoma from Korean Patterns of Care Study 1998–1999

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Background: The aim of this study is to verify prognostic factor of initial serum squamous cell carcinoma (SCC) antigen level as a tumor marker for uterine cervical carcinoma patients with squamous cell carcinoma histology. All the patients received radical radiotherapy and the data were collected from web-based Korean Patterns of Care Study (PCS) 1998–1999 program.
Materials and Methods: We conducted a nationwide on-line data entry of uterine cervical cancer after completion of web-based Korean PCS program (http://www.pcs.re.kr) Of the whole 42 hospitals operating at that time (1998–1999 year) 33 institutions participated the study. Selection of the patients in each hospital was based on randomized sampling process. External audit of the on-line record was reviewed and confirmed by trained central data manager visiting each hospital. The data of 647 patients were reviewed and 400 patients underwent serum SCC antigen level evaluation at diagnosis. We analyzed the treatment outcome of the patients according to SCC level.
Results: The median age of the 400 patients was 61 years old (range 28−86) and 55% (210 patients) of the patients were FIGO stage IIB. Pre-treatment serum SCC antigen level were in the range of 0.1–369 ng/ml. The positivity rate (2.0 ng/ml or more) was increased with FIGO stage. Number of the patients with normal SCC was 115, mild elevation (2.0−4.9 ng/ml) 105, moderate (5.0−19.9 ng/ml) 116, and severe 64. After radiotherapy, 91% of patients with the elevated SCC level were normalized. Thirty five patients developed locoregional relapse and 73 patients had distant metastasis as first event during follow-up period. The 5 year relapse free survival rate (5YRFSR) for FIGO I, II, III, and IV were 92.1%, 61.5%, 31.0%, and 30.0% respectively. The 5YRFSR according to SCC level were 74.5% for normal, 64.1% for mild elevation, 47.0% for moderate elevation, and 58.6% for severe elevation ($p = 0.0005$). By multivariate analysis, initial SCC level was still a prognostic factor ($p = 0.022$).
Conclusions: initial SCC assay is a useful aid to predict the prognosis of squamous cell carcinoma of the uterine cervix. For patients with moderate to severely elevated SCC level (>5.0 ng/ml), more aggressive treatment including higher radiation dose and/or intensive concurrent chemotherapy is needed for better disease control. We recommended that SCC antigen assay and monitoring during follow-up is necessary from the results of Korean PCS 1998–1999 for uterine cervix cancer.

5014 POSTER

Evaluations on the natural history of human papillomaviruses infections and related diseases in HIV-seropositive women

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Background: Convincing evidence has been accumulated that human papillomaviruses (HPV) are the most important risk factor for cervical carcinogenesis also in women infected with human immunodeficiency virus (HIV-seropositive). So far, long-term follow-up of patients with bordeline changes has been difficult to achieve. Thus, the see-and-treat management paradigm was used. Introduction of highly active antiretroviral therapy (HAART) allow a longer patient survival and a more detailed analysis of opportunistic pathologies HIV-associated.
We documented the impact of HAART on the natural history of HPV infections testing specimens by polymerase chain reaction (PCR) with two pairs of primers (MY09/MY11 and GP5*/GP6*) and DNA sequencing.
Material and Methods: From September 2002 throughout January 2005, 379 patients were enrolled at the University of Brescia. Cases are selected at preliminary gynaecological visit as low-grade abnormality. The patients were followed-up by cytology and colposcopy at 6 months intervals and referred for biopsy in cases of persistent or increasing abnormalities. All women had PCR tests at 0, 6, 12, 24, 36 months and a colposcopic-directed biopsy at the endpoint.
Results: At baseline, cytological diagnoses showed 182 smears (48%) within normal limits, 109 ASCUS (29%), 68 low-grade SILs (18% LSIL) and 20 high-grade SILs (5% HSIL). The median CD4 cell count at inclusion was 250/mm^3. The overall HPV DNA high-risk positivity detected was 73% by PCR in the categories of ASCUS/LSIL/HSIL and 12% in the normal specimens. After 1 year, 199 HIV-patients were lost, in the remaining 180 women, the high-risk DNA positivity was maintained in the 58% of samples while 12 patients (7%) showed a cyto-histological progression. In the 110 patients followed-up at 24 months the overall HPV positivity was 52% and 13 showed a cyto-histological progression to high-grade neoplasia. At the end-point only 15 of 105 women (14%) had biopsy-confirmed CIN3.
Conclusions: Nowadays, timely treatment by HAART confers a substantial improvement in curative potential and live cost savings of patients. Meanwhile higher reliability of PCR techniques has substantially increase the detection rate of incoming HPV infections with acceptable positive predictive values. Our studies revealed that HAART modified the course of CIN in HIV-infected women by significantly reducing HPV positivity and increasing the reversion of the low-grade abnormality to normality. Fine data on the impact of HAART on the different cervical HPV lesions will be presented.
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5015 POSTER

The usage of expression profiles of p53, delta Np63, and delta Np73 as prognostic markers in invasive cervical carcinoma

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The tumor-suppressor protein p53 has been shown to belong to a family that includes two structurally related proteins, p63 and p73. In contrast to p53, p63 and p73 encodes truncated N-terminal isoforms of p63 (delta Np63) and p73 (delta Np73) which can inhibit the transactivating function of full length isoform. In this study, we investigate the correlation between the inactivation of p53 protein via the presence of oncogenic viral E6 and the overexpression of delta p63/p73 isoforms in 33 invasive cervical carcinoma. Overexpression of p14 and p16 will be used as indicators for the inactivation of p53 and pRb by HPV oncoprotein E6 and E7. Immunostaining of p14, p16, delta Np63 and delta Np73 will be compared to the cervical staging and HPV status using 20 normal cervix as control. Overexpression of p14, p16 delta Np63 and delta Np73 are statistically increased comparing to normal cervix with p value (Mann-Whitney test) of <0.001, <0.001, 0.002 and <0.001, respectively. Our results clearly showed that overexpression of p14 and p16 is well correlated to the presence of integrated HPV, while negative staining was found in normal cervix. Interestingly, inactivation of p53 protein was found to correlate with up regulation of delta p63 ($p < 0.001$) but not delta p73 (0.454). Moreover, expression profiles of p14, p16, deltaNp63, and deltaNp73 demonstrated statistically associated with clinical staging using Mann-Whitney test at $p < 0.001$, $p < 0.001$, $p = 0.004$ and $p < 0.001$, respectively. Our study suggested that loss of functional p53 protein might enhance p63 expression leading to increase deltaNp63 isoform. Outcome of the followed-up cases will also be analyzed in order to evaluate its possible potential as prognostic profile in cervical cancer treatment.

5016 POSTER

A prospective study of MR imaging prognostic factors in women with cervix cancer treated with chemo-radiation

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Purpose: Chemo-radiation (CRT) has become the standard of care in women with locally advanced cervix cancer. The use of MRI as part of the staging investigations makes it possible to accurately estimate the volume and relations of the tumor, as well as the presence of lymph nodes. Further improvements in patient outcome will depend on a better understanding of the causes of pelvic and systemic relapse and the use of predictive prognostic factors to individualize treatments. The knowledge of these factors through modern imaging could be used for selecting the optimum treatment modality while minimizing side effects.