Slobodan ČIKARIĆ Sonja PETROVIĆ-STUPAR Ivanka MARJANOV Ljiljana RUDAN Slobodanka ČOLAKOVIĆ Aleksandar TOMAŠEVIĆ Brankica RAKOVIĆ

INSTITUTE FOR ONCOLOGY AND RADIOLOGY OF SERBIA, BELGRADE, SERBIA AND MONTENEGRO

Radiotherapy vs. radiotherapy + chemotherapy of advanced cervical cancer (IIB - IVA): Regression of tumor, early and late sequelae, relapses of disease and 3-year survival (The Third phase)

KEYWORDS: Cervix Neoplasms; Radiotherapy; Drug Therapy; Treatment Outcome

INTRODUCTION

A prospective randomized study of 184 patients with advanced cervical cancer (stage IIB - IVA) treated with either radiotherapy alone (RT group) or radiotherapy + chemotherapy (RT + CH group) was started at the beginning of May 2002 and the last patient of this series was treated in March 2003. (Project No 1683 of Ministry of Science, Technology and Development of Rep. Serbia - II Phase of study). The aim of this study is to show comparison of treatment results of advanced cervical cancer using either RT or RT + CT.

PATIENTS AND METHODS

Clinical material of 184 cervical cancers was randomized in two groups: RT - 94 (51.1%) patients and RT + CT - 90 (48.9%) patients. Distribution of patients by stages (FIGO), histopatological type (and grade), and age was very similar in both groups.

Treatment regimes were:

1. RT group: - EBT - 46Gy/22 fractions, 2 parallel opposite fields without central Pb shields + HDR brachytherapy - 5x7 Gy/.A (Uterine tube + 2 vaginal ovoids)

2. RT + CT group: RT as first group + CT using cisplatin (5 cycles during radiotherapy, once a week).

RESULTS AND DISCUSSION

Partial regression of cervical tumor immediately after the end of the treatment

Address correspondence to:

Prof. Slobodan Čikarić, Institute for Oncology and Radiology of Serbia, Pasterova 14, 11000 Belgrade, Serbia and Montenegro, E-mail: cikaric@ncrc.ac.yu

The manuscript was received: 30.09.2005.

Accepted for publication: 15.10.2005.

was 86% of patients for RT group vs. 83% of the patients in RT + CT group. Early complications (diarrhea, dysuria, abdominal pains, nausea, vomitus, leucopenia, thrombocytopenia, anemia, febricity) were noted in 37.5% patients of RT group vs. in 58,3% of the patients of RT+CT group (I Phase of study).

Corrected actuarial 3-years survival (RT vs. RT+CT): stage IIB-76% vs. 84%; stage IIIB-49% vs. 60%; total-63% vs. 76%-there is no statistically significant difference between two groups p>0.05.



Figure 1. Corrected actuarial 3-year survival

Late sequelae were noted as follows (French -Italian glossary): RT group vs. RT+CT group: G1-23% vs. 20%; G2-29% vs. 30%; G3+4-14% vs. 22%, all of late seq. - 66% vs. 72% - there is no statistically significant difference between two groups p>0.05.



Figure 2. Distribution by therapeutic modality and sequelae

Relapses were: (RT vs. RT+CT): local (regional) 5% vs. 3%, metastatic 12% vs. 13%, local and metastatic 4% vs. 6%, total 21% vs. 22% - there is no statistically significant difference between two groups p > 0.05.



 $\label{eq:Figure 3.} \ensuremath{\text{Figure 3.}} \ensuremath{\text{Distribution by the rapeutic modality and relapse}$

CONCLUSION

Period of following of our patients after treatment is still short (3 years) and yet we cannot bring conclusions. Based on relapses of disease and sequelae in these two groups of patients we can conclude that there was no benefit of RT + CT vs. RT alone in the treatment of locally advanced cervical cancer.

We shall follow-up fate outcome and shall compare results of these two groups of treated patients next 5 years.

REFFERENCES

1. Perez CA, Brady LW. Principles and Practice of Radiation Oncology. Philadelphia: J.B. Lippincott Company; 1987.

2. Alberts DS, Garcia D, Mason-Liddil N. Cisplatin in advanced cancer of the cervix: an update. Semin Oncol 1991;18 Suppl 13:11-24.

3. Fletcher GH. Textbook of radiotherapy. Philadelphia: Lea & Febiger; 1980.

4. Hoskins VJ, Perez CA, Young RC. Principles and Practice of Gynecologic Oncology. Second Edition. Philadelphia: Lippincott-Raven Publishers; 1997.

5. Green JA, Kirwan JM, Tierney JF, et al. Survival and recurrence after concomitant chemotherapy and radiotherapy for cancer of the uterine cervix: A systematic review and meta-analysis. Lancet 2001;385:781-6.

6. Pearcey R, Brundage M, Drouin P, et al. Phase III trial comparing radical radiotherapy with and without cisplatin chemotherapy in patients with advanced squamous cell cancer of the cervix. J Clin Oncol 2002;20:966-72.

7. Ferlay J, Bray F, Pisani P, Parkin DM. GLOBOCAN 2000: Cancer Incidence, Mortality and Prevalence Worldwide, IARC CancerBase No.5. Lyon: IARC Press; 2001.

8. Keys H, Park RC. Treatment and survival of patients with cancer of the cervix and nodal metastases. Int J Radiat Oncol Biol Phys 1976;11:1091-7.

9. Rein DT, Kurbracher CM. The role of chemotherapy in invasive cancer of the cervix uteri: current standards and future prospects. Anti-Cancer Drugs 2001;12:787-95.

10. Thigpen T. The role of chemotherapy in the management of carcinoma of the cervix. Cancer J 2003;9:425-32.