

5. Sorensen, F.B., Bichel, P., Jakobsen, A. /1991/: Stereological estimates of nuclear volume in squamous cell carcinoma of the uterine cervix and its precursors, *Virchows arch /Pathol Anat/*, 418 : 225 - 233.
6. Sorensen, F.B., Bichel, P., Jakobsen, A. /1992/: DNA - level and stereologic estimates of nuclear volume in squamous cell carcinomas of the uterine cervix. A comparative study with analysis of prognostic impact, *Cancer*, 69: 187 - 199.

## POSTOPERATIVE TNM CLASSIFICATION OF CERVICAL CANCER (1989-1995)

Neli Baseska

DEPARTMENT OF HISTOPATHOLOGY AND CLINICAL CYTOLOGY,  
INSTITUTE OF RADIOTHERAPY AND ONCOLOGY, MEDICAL FACULTY -  
SKOPJE, REPUBLIC OF MACEDONIA

*Summary:* The aim of this study is to present and analyze the results of the application of postoperative TNM classification of cervical cancer. For this purpose we have reviewed the clinical and histopathological data of 464 patients with cervical intraepithelial (74) and invasive cancer (390) who underwent abdominal hysterectomy or radical hysterectomy with regional lymphadenectomy from March 1989 to December 1995. There were 74 (16,0 %) cases of Stage 0, 211 (45,5 %) of Stage I, 88 (18,9 %) of Stage II, 84 (18,1 %) of Stage III and 7 (1,5 %) cases of Stage IV.

In our case series (399) we have found significant rate of discordance clinical FIGO and postoperative stadium. The incidence of error increases progressively as the stage grows more advanced, with prevalent understaging. Cross relationships of tumor extent, incidence of lymph node metastasis, grade of tumor differentiation, histological type, and age of the patients were also studied and are discussed. These data indicate that postoperative TNM classification staging system should be applied regularly, systematically and universally.

### INTRODUCTION

The exact knowledge of tumor spread is a prerequisite basis for an accurately determined prognosis and for a correctly planned therapeutical approach in every patient with cervical carcinoma. Many different staging systems are employed as methods for its determination, but they differ by their accuracy. Thus, it is well known that is a significant disagreement between the neoplastic extension according to pathological data from operative specimens or the postoperative stage.

The aim of this retrospective study is to present and analyze the results of the application of postoperative TNM classification of cervical cancer.

## MATERIALS AND METHODS

We have reviewed the clinical and histopathological data 74 patients with carcinoma in situ and 390 patients with invasive cervical carcinoma, who had undergone surgical treatment between March 1989 and December 1995. One hundred and thirty-two of these patients underwent abdominal hysterectomy, while 325 patients underwent radical hysterectomy with regional lymphadenectomy. For the 325 patients treated by radical hysterectomy, the total number of resected lymph nodes was 8 917. The mean number of nodes dissected per patient was 27,4, (range, 1-58). All the patients were staged according to the postoperative TNM classification of UICC (1987) guidelines. There were 74 (16,0 %) cases of Stage 0, 211 (45,5 %) of Stage I, 88 (18,9%) of Stage II, 84 (18,1 %) of Stage III and 7 (1,5 %) cases of Stage IV. Pelvic lymph node involvement was found in 85 of 464 patients (18,3 %), where as the overall incidence of lymph nodal metastases for 325 patients treated with radical abdominal hysterectomy and pelvic lymphadenectomy was 26,2 %. For the node-positive patients the mean number of invaded nodes was 3,5 (range, 1-36).

At first step, a comparison between clinical FIGO stage and postoperative stage based on postoperative TNM classification, was performed. Afterwards, the parameters of pTNM classification were correlated (Pearson's  $\chi^2$  - test) between themselves, as well as with other clinico - pathological data, such as: the tumor grade, the histological type of the tumor, and the age of the patients with cervical carcinoma.

## RESULTS

In our case series of 399 patients with clinical data about the FIGO stage, we have found a significant rate discordance between clinical FIGO and postoperative stage. The incidence of error increases progressively as the stage grows more advanced, with prevalent understaging. For example, the staging error is 21,6 % in 0 stage, 8,5 % in the IA stage, 46,0 % in IB stage, 89,9 % in IIA, 68,7 % in IIB, and 66,7 % in III stage

An analysis of the distribution of the patients with cervical carcinoma according to tumor extent and lymph node involvement, revealed that the incidence pelvic lymph node involvement is related to the tumor extent ( $p < 0,001$ ). Thus, the incidence of lymph node involvement was 18,1 % (26/161) for the patients with carcinomas limited to the cervix, but it increased more than two-fold (53/116 or 45,7%) for the patients with parametrial extension. The grade of histological differentiation is related to the tumor extent ( $p < 0,001$ ), as well as to the pelvic lymph node involvement ( $p < 0,001$ ). More than a half of the poorly differentiated carcinomas were locally extended, and in more than one third of them lymph nodal metastases were found (58/145 or 40,0 %). Comparison of the histological type of cervical carcinoma with the tumor extent showed that the incidence of parametrial extension was significantly higher ( $p < 0,05$ ) in adenocarcinomas. On the other hand, no significant associations were identified between the specific histotypes and pelvic lymph node involvement or the grade of histological differentiation. We have also found a positive correlation between the age of the patients and tumor extent ( $p < 0,01$ ), incidence of lymph nodal metastasis ( $p < 0,02$ ), and histological type of cervical carcinomas ( $p < 0,001$ ). In the older age groups (more than 50 years) the neoplasms were more frequently diagnosed in more advanced stages. The incidence of lymph nodal metastasis was much higher in the younger age groups (less than 40 years). 40,3 % of the patients with invasive squamous cell carcinomas are in the age group 31 - 40 years (mean

42,4 years). 37,3 % of the patients with cervical adenocarcinoma are in the age group 51 - 60 years (mean, 46,9 years). On the contrary, there is no correlation between age of the patients and grade of histological differentiation of cervical carcinomas.

### DISCUSSION

Our data about the discordances between clinical FIGO stage and postoperative stage are consistent with the observations reported by several other authors<sup>1-3</sup>. The only difference is the prevalent overstaging in these studies, contrary to the prevalent understaging we have observed in our case series. On the other hand, it was difficult to compare our results about the distribution of the patients with cervical carcinoma according to postoperative stage, their characteristics, and correlations between them, with the references from other similar studies<sup>4-8</sup>. The main reason for this is that the bases for the classification of cervical carcinomas in most of these studies is the clinical FIGO stage. Therefore, to enable such a comparison, we had to correct their data, having in consideration the reported differences between the clinical FIGO and postoperative stage. These comparisons showed that our and their results were more or less in agreement.

### CONCLUSION

In conclusion, all these data indicate that the postoperative TNM classification staging system should be applied regularly, systematically and universally. It is a sound basis for an appropriate planning of the following therapeutical strategy, for a correct determination and predicting of the prognosis, and for an exact evaluation and valid comparison of the treatment results of the patients with cervical carcinoma.

### REFERENCES

1. Onnis A: Surgical diagnosis and therapy in gynaecological oncology. EUR J Gyn Oncol 8 : 298 - 306, 1987. -
2. Meneghello E, et al: Clinical, surgical and pathological evaluation of parametria in cervical carcinoma. Eur J Gyn Oncol 8 : 563, 1987. -
3. Lanza A, et al: Lymph nodal metastases and clinical stage of cervix carcinoma. Eur J Gyn Oncol 8 : 61 - 67, 1987. -
4. Kishi Y, et al: A clinico-pathological evaluation of parametrial involvement of deep invasive carcinoma of the uterine cervix. Eur J Gyn Oncol 7 : 18 - 27, 1986. -
5. Kodoma S, et al: Age as prognostic factor in patients with squamous cell carcinoma of the uterine cervix. Cancer 68 : 2481 - 2485, 1991. -
6. Lanza A, et al: Lymph nodal metastases and pathological patterns in cervical cancer: A critical review. Eur J Gyn Oncol 10 : 3 - 8, 1989. -

7. Panici PB, et al: Neoadjuvant chemotherapy and radical surgery in locally advanced cervical cancer, *Cancer* 67 : 372 - 379, 1991. -
8. Rozzo ML, et al: Histological grading as a pathological risk factor in carcinoma limited to the cervix of the uterus, *Eur J Gyn Oncol* 8 : 564, 1987.

## VISOKOVOLTAŽNA TRANSKUTNA RADIOTERAPIJA DIZGERMINOMA OVARIJUMA

Saša Ljubenković, Slađana Filipović, Dragan Stojanović,

Mirko Milutinović, Ivan Tomić

KLINIKA ZA ONKOLOGIJU NIŠ

INSTITUT ZA PATOLOŠKU ANATOMIJU NIŠ

### *Abstrakt*

Od marta 1988 - marta 1996. godine u Klinici za onkologiju Niš lečeno je sedam žena sa DG: Dysgerminoma ovarii, prosečna starost 42 god. Od pet "čistih" dizgerminoma sa St. III i Iv FIGO, kod dve pacijentkinje je došlo do letalnog ishoda, dve su sa preživljavanjem 96 i 72 mes. dok je peta trenutno hospitalizovana radi reiradijacije, posle 'slobodnog intervala" od 20 mes. Ovakav polovičan rezultat u lečenju radiosenzibilnog tumora objašnjavamo pre svega visokim stadijumom bolesti u vreme zračenja i patohistološkom slikom (anaplastična forma, masivna nekroza).

Ključne reči: Dysgerminoma, radioterapija.

### *UVOD*

Od marta 1988 - marta 1996. godine u Klinici za onkologiju Niš u Knez Selu lečeno je sedam žena sa dizgerminomom ovarijuma, starosti od 21 do 59 god. (prosek 42 god.). Dve, kod kojih su nađeni fokusi "Yolk sac" tumora, dijagnostikovane su u St. Ib i St. IV FIGO i lečene su kombinacijom hirurških i hemoterapijskih metoda, posle čega je došlo do recidiva i letalnih ishoda unutar godinu dana. Od pet preostalih "čistih" dizgerminoma tri su dijagnostikovane u St. III FIGO, te je sprovedeno hirurško lečenje i postoperativna zračna terapija, dok je kod dve sa St. IV FIGO postoperativno sprovedena palijativna zračna terapija a kod jedne i adjuvantna hemoterapija.

### *CILJ RADA*

Ukazati na činjenicu da ovi, inače radiosenzibilni tumori nisu nužno i radiokurabilni.