

**POSTOPERATIVE TNM CLASSIFICATION OF BREAST CANCER -  
IMPLICATIONS FOR FURTHER TREATMENT (1989 -1995)**

Yashar Genghis, Baseska Neli

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

*Summary:*

This study includes 1403 postoperative breast cancer specimens elaborated in our laboratory over the period of last 7 years. The average age of the patients is 54.36 years (range 22-90) and the majority are in the age groups of 41-50 and 51-60 (55.95%). The size of the primary tumour (longest diameter) belongs mostly to the category of T2 (primary tumor 2-5 cm.). There are 831 cases in this group or 59.23%. Metastatic spread in the regional lymph nodes is absent in 541 cases (38.56%) and in 278 cases (19.81 %) metastatic deposits are encountered in N1 biv category (bigger than 2 cm. in the greatest diameter). The most common type of breast cancer is ductal carcinoma which is present in 649 cases (46.26%). Grade of histologic differentiation is mostly moderate (G2) with 864 cases (61.58%). The majority of the patients are in the stage II of the disease (II A + II-B = 953 cases or 67.97%). In comparison to the similar studies found in the available references it is obvious we have fewer patients in the stage I but the same number in stage II where the disease is more advanced. This means that examination and diagnosis of the breast cancer is for a step later than the degree when usually more aggressive therapy is needed considering the percent of the patients in the higher stages of the disease.

*INTRODUCTION*

Comparison of end results of cancer treatment particularly between clinics requires some degree of comparability of the neoplasms being assayed. To this end, systems have been derived to express, in staging of neoplasms as parameter of the clinical gravity of the disease. The pathohistological pTNM classification and staging of the breast cancer is based on the size of the primary lesion (T), its extent of spread to regional lymph nodes (N), and the presence or absence of blood-borne metastases (M)<sup>6</sup>. This study also includes: 1. grading of a breast cancer which is based on the degree of differentiation of the tumor cells as presumed correlates of the neoplasms aggressiveness; 2. histologic types of breast cancers; 3. age groups of the patients.

The aim of this study is to present and analyze the results of the application of the postoperative TNM classification of breast cancer, as a way to the clinicians to obtain the best treatment for the patients.

## MATERIALS AND METHODS

The analytical study encounter the histopathological data of 1403 female patients with breast cancer who underwent radical mastectomy or tumorectomy (quadrant resection) with regional lymphadenectomy from March 1989 to December 1995. The average age of the patients is 54.36 years (range from 22-90). 13.851 lymph nodes had been identified exactly, (range 1-41) or 10.08 lymph nodes per case. The number of lymph nodes occupied by metastatic deposits was 4635 (range from 1-32) or 5.56 per case. The UICC (Union Internationale Contre Cancer) staging system has been used and the parameters (T,N,M) had been related among themselves and altogether with the degree of histologic differentiation, histotype and the age of the patients.

## RESULTS

The majority of the primary malignant breast tumours are in the category of T2 (2-5) which includes 831 cases (59.23%). Grade of histologic differentiation is mostly moderate and it is found in 864 patients (61.58%). The growth of the primary breast cancer increase the risk of spread to regional lymph nodes, so 40.62% are without lymph nodes involvement (No+Nx=541+29=570) while 59.38% are with involved lymph nodes. The most frequent group are the patients with the metastatic deposits greater than 2 cm. (N1 biv) and 278 patients belongs to this group (19.81%). There is significant relation between the degree of the histologic differentiation and the lymph nodes involvement - the lower grade of tumor cells malignancy shows the lower risk of metastatic spread. There is no significance among the size of the primary tumor, the lymph nodes involvement and the age groups. The most frequent histological type of breast cancer is represented by ductal carcinoma with 649 patients (46.26%) and it shows high significance with the primary tumor size and the lymph nodes involvement. In situ ductal and lobular carcinomas are well differentiated (16 out of 19 - 84,21% and all 6 00%, respectively). The mucinous (61.36%), intracystic (73.7%) and papillary carcinomas (100%) are mostly well differentiated, while the ductal and invasive lobular carcinomas represented with 62.65% and 71.22%, respectively are predominantly with moderate differentiation. High grade of malignancy is shown at the anaplastic carcinoma and at lobular carcinoma with squamous, spindle cell and sarcomatoid metaplasia (100%). The most frequent age groups of patients are between 41-50 and 51-60 years (28.65% and 27.29% respectively). The mucinous carcinomas were usually found in older age groups (over 51) represented with 63,63% (28 out of 44 cases) while the anaplastic carcinoma (100%), carcinoma with sarcomatoid metaplasia (100%), medullary (80%) and tubular carcinomas (76%) are more common in the younger age groups (below 51 year of age).

## DISCUSSION

Considering the above mentioned data it is obvious that patients undergo the surgical treatment in more advanced stages of the disease. Two thirds of the cases (67.94%) are in stages II (II-A+II-B). The similar studies of Nachlas<sup>4</sup> and Doussal<sup>1</sup> shows 53% and 67% of the patients in the same stage of the disease. It means that these results indicate organized systemic screening as an imperative in order to reach the very

beginning of the tumour growth. With the early detection the aggressive and mutilant surgical treatments should be avoided.

### CONCLUSION

The postoperative TNM classification data occur clinical evaluation of the disease and implications for further treatment. At patients with worse prognostic parameters like tumour size greater than 2 cm. (T2,T3 etc.), the lymph nodes involvement (N1b,N1b,.N2,N3) or distant metastasis (M1) usually the more aggressive treatment is needed<sup>3,7</sup>. Although the diagnostic methods for evaluation the breast cancer are widely available (mammography, fine needle aspiration biopsy etc.) the results after the intruded surgical treatment usually shows advanced stage of the breast neoplasm<sup>2,5</sup>. The predictive values of the TNM classification could be evaluated after the period of "follow up".

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## NEUROENDOKRINA DIFERENCIJACIJA KARCINOMA DOJKE

### IMUNOHISTOHEMIJSKA STUDIJA KORELACIJE SA FAKTORIMA POZNATOG PROGNOŠTIČKOG ZNAČAJA

Šrbac M., Milenković Đ., Ilić S., Dimitrijević J., Stoiljković B., Carević Z.,  
Milosavljević I., Spasić P

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