THE NEED FOR UNIFORM CANCER STAGING WITH EMPHASIS ON CANCER OF THE CERVIX

By

Dr F. Tabbane
Salah Azaiz Cancer Institute, Tunis

1. Introduction

The need to classify cancers according to their degree of extension was realized quite early and, thus, various classification systems have been proposed. The TNM system, by its descriptive character, is easily reproducible and particularly well adapted to most carcinomas. Its usefulness in other tumour categories (of mesenchymal or hematopoetic origin) is, on the other hand, impossible and classification by staging takes pre-eminence. Improvement of diagnostic techniques and treatments, better knowledge of the natural history of cancers, and results of various long-term treatments periodically leads to modifications of classification systems. I do not have to reiterate that the choice and universal use of a standard classification is indispensable for fruitful collaboration and a valid application of treatments.

2. Goals of classification

Depending upon the "extent of disease", the same type of cancer can constitute a clinical, prognostic, and therapeutic entity of wide variation. This fact, known for a long time, was at the origin of the first classification methods which, in the case of cancer of the cervix, date back to 1922. The use of a common language between practitioners and therapists has become necessary in order to compare results of treatment, to disperse approved protocols, and to adequately justify modifications of either.

The choice of therapy for any patient with a diagnosis of malignancy can only be made after a systematic work-up to determine the extent of disease which then allows a precise classification of the tumour. The adaptation of the therapeutic protocol according to the degree of tumoural extension is obvious, the concern of every therapist being to administer a treatment that is neither exaggerated nor inadequate. The variety of therapeutic means demands a more and more precise description of those cases where they are applied. A case in point would be the carrying out of a surgical intervention based uniquely on the pre-therapeutic staging, so much does a precise classification of the disease become essential. Normally, the pre-therapeutic work-up is, and should be, routine and well clarified because the classification which is based thereon cannot otherwise be used consistently. These immediate interests in the pre-therapeutic classification aside, the necessity of a system of classification is also evident when it is a question of studying, in a large comparative sense with data from several centres or countries, the results of various treatment protocols. At the least, the recourse to therapeutic trials implies a great precision in the classification of patients being studied.

On a more theoretic level, the additional knowledge of the classification of certain cases being studied in a country or region gives an idea of the natural history of the cancer, its mode of evolution, and also of the medical substructures for screening and treatment in that country or region. By a comparative study of these results in various countries, some valuable conclusions can be drawn concerning the influence of environmental and immunologic factors.

3. Methods

Among the advantages of a classification system, its immediate practical value, its indication in the choice of appropriate treatment, is unsurpassed. Thus, among all the variables differentiating tumours which are more as less widespread, it must disclose and identify those which have prognostic and therapeutic value by their quantitative or qualitative character. Classification by staging has been held in high regard for some time and it is still used for certain types of cancers. Apart from its subjectivity by the suggestion of a regular professional team which does not always exist, this system lacks precision as it combines into one parameter all the diverse aspects of tumour extension.

The merit of the TNM system, which unfortunately is not applicable to all cancers, is its purely descriptive character. Thus, it differentiates between the three categories of tumour extension: the description of the tumour itself, the extent of lymph node involvement and the existence of distant metastases. This classification is used successfully in a large number of epithelial cancers, such as breast, vulva skin, head and neck tumours: cases where the tumours are superficial or easily accessible and where the clinical examination and some simple para-clinical examinations permit an easy evaluation of the various factors.

For deeper lesions, where the lymphatics are inaccessible to the clinical examination, TNM classification is incomplete due to the absence of the N aspect.

For other malignancies in which the evolutionary pattern is different from that of epithelial tumours (such as the sarcomas or lymphomas),the TNM system is not applicable. Thus, classification by staging has been retained in a large number of cancers inclu- ding the following:

- Hodgkin disease: classification must be interpreted with the knowledge of the staging procedures in each case. The stage classification is well adapted for this disease because of the really progressive pattern of the evolution.

- Non-Hodgkin lymphomas: but the knowledge of evolution is not as good, and the classification less suitable.

- Epithelial: cancers which are not easily accessible (ovaries, GI tract; lung cancers).

4. Cancer of the cervix uteri

TNM classification has been described and used for cervical cancer, but it suffers due to an ignorance of N. Classification by stages therefore remains in widespread use. It is able to exactly reproduce the T aspect, but does not take into account, as does the N aspect, the regional lymph nodes, classifies as M1 the rare tumours that show evidence of metastases at the first presentation. The extension most frequently judged metastatic consists of pre-aortic adenopathies, but it is practically impossible to discern on a clinical basis. Lymphography is widely employed, but it lacks precision when determination of therapy is at stake. Classification of cervical cancers suffers by the inadequacy of radiological and clinical examinations which are the basis of judging tumour extension and, thus, classification.

Exploratory laparotomy for clinical staging has been proposed for non-surgical cases. This seems to be the only means at present available to define adequately "extent of disease" and, thus, the appropriate treatment.

Having criticized classification for its weakness here, Brunsching has proposed a surgical classification system. However, as this type of system could apply only to surgical candidates, the need is not entirely satisfied.

Greater and greater development of diagnostic means aided by systematic screening
programmes has permitted the discovery of very small (subclinical) cancers of the
cervix uteri: stage 0, microinvasive carcinoma. Their classification is drawn from a
precise histopathological analysis and their definition must be perfectly uniform. A
recent study by Christopherson concerning a large number of cases has shown that a
simple hysterectomy for microinvasive tumours (<5 mm. in depth) is able to produce
the same results as more agressive treatments which can lead to other serious complica-
tions. The value of a rigorous classification and of a collaboration between various
diagnostic and therapeutic disciplines as well as that between various centres appears
clear until a simplification of treatment with diminished risks to the patient, all
the while maintaining the chances of cure, is obtained.

5. Frequent inadequacies of classification systems

The static and purely anatomic considerations of classification can, in general,
be criticized. No particular note is taken of the cancer's mode of evolution, espe-
cially concerning rapid growth. There is absolutely no indication of the host-tumour
relationship or the patients' immune status which constitute, nonetheless, important
factors relating to prognosis. Thus, the importance of the PEV factor ("poussée
évolutive" - rapidly progressing) has caused us to follow the example of the Institut
Gustave- Roussy in adding it to our TNM classification of breast cancers. Also of
interest is to take into account the histology of certain tumours.

For these above reasons, any improvements or modifications of classification systems,
once they are proven, must be rapidly made known and put into practice in various
countries. This fact implies and assumes a constant collaboration between different
authors as they make their findings known.

The study of cancer in countries where previously little structured study has gone
on will probably, as in Tunisia, reveal particularities which will need to be described,
qualified, and compared. This implies, above all, that a great effort will be necessary
in gathering information, in classifying, and in studying epidemiological aspects of
these cancers.