

Reprinted from:

Selected papers from the

# **XX Congress of the European Association of Cranio-Maxillo-Facial Surgery**

Bruges (Belgium), September 14-17, 2010

Editor

**Maurice Y. Mommaerts**



**MEDIMOND**  
**INTERNATIONAL PROCEEDINGS**

# Proposal for the application of the new terms accessibility (a) and inaccessibility (i) in the renowned tnm staging and in what we refer to as $\Omega$ (n):tnm

Hernández Altemir, F.<sup>1</sup>, Dr.Hernández Montero S.<sup>2</sup>,  
Dr.Hernández Montero S.<sup>3</sup>, Dr.Hernández Montero E.<sup>4</sup>

<sup>1</sup>Ph D, Stomatologist and Medical Specialist in Oral and Maxillofacial Surgery, Founder Member of the European Society of Cranial-Maxillofacial Surgery and of the European Head and Neck Society, former Collaborating Professor Extraordinaire at the University of Zaragoza and Academic Correspondent for the Royal Academy of Medicine in Zaragoza, Private Practice.

<sup>2</sup>Oral and Maxillofacial Surgeon. Academic Director of the Official Master's in Dental Implantology and Implant-aided Prosthesis at Alfonso X el Sabio University in Madrid and Professor at the Odontology Faculty of Huesca.

<sup>3</sup>Professor of Buccal Medical Pathology for the Bachelor of Odontology at the Faculty of Health and Sports Science (Huesca),

<sup>4</sup>Medical Faculty Specialist in Otorhinolaryngology at the Viladecans Hospital and the García-Ibáñez Neurology Institute in Barcelona.

## Summary

Accessibility (a) and Inaccessibility (i) in TNM and also for staging with a new nomenclature generally defined using the letters:  $\Omega$  (n):TNM; developing both of them theoretically and practically with the aim of attaining greater precision in classification, diagnosis, treatment, follow-up, investigation and publication, as well as in their employ for computational goals within the pathologies included in Global Oncology for clinical use by surgical oncologists, doctors and Tumour Committees and other interested parties.

**Key words:** Accessibility, Inaccessibility, TNM, Tumour, Oncology, Cancer Computer.

## Introduction

We will not uncover the importance that the letters TNM have had and continue to have within the study and treatment of head and neck tumours. We do hope that this proposal will not be considered audacious but an attempt to improve TNM classification, by including some new details to it and make it even more useful. Attaining consensual therapeutic conclusions is not always straightforward to the

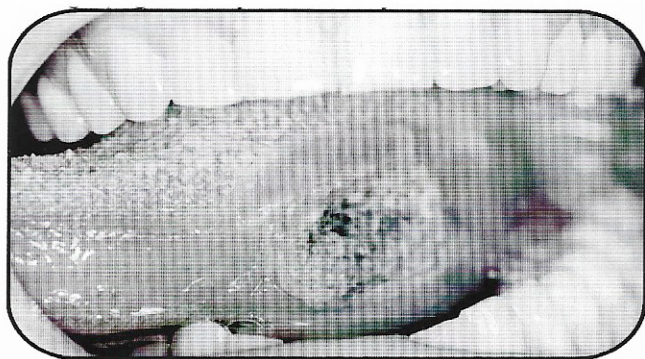


Fig. 1

extent that the Tumour Committees will be requiring steadily greater computerised support for decision-making – as there are burgeoning numbers of specialities, agents, parameters and data.

## Material and Methods

Our wide experience in head and neck tumours<sup>3,4,5,7,9,12</sup> allows us to think that is necessary to precisely express what each specialist believes to be their **most specific** therapeutic determination. In order to achieve this all that is needed is to add two suffixes to each of the suffixes corresponding to the TNM nomenclature<sup>10</sup>. We have called these suffixes **(a) for accessibility** and **(i) for inaccessibility**. Thus, each specialist would choose one or the other depending on their medical-surgical knowledge, capacity and skills. Accessibility(a) means that the tumour is susceptible of **radical treatment**, whether this is surgery, radiotherapy and/or chemotherapy; by contrast, (i) inaccessibility refers to when radicalism is not clearly predictable.

We shall look at one practical example: 45y.o. female with an epithelial tumour on the left hemitongue (Fig.1), generally defined by the classic letters and suffixes T3 N3 M0.

Using our proposals, each specialist must add to the suffixes 3, 3, the (a) or the (i) and, so, the surgeons could decide that the case is: T3(a) N3(a) M0, the radiotherapists that it is: T3(i) N3(i) M0 and the oncologists it is: T3(i) N3(i) M0. The therapeutic decision should be granted to the one to be in the best position to perform the first radicalism attempt, what in this case, would be surgical. Our specific proposal for the TNM denomination for this case, as surgeons, is: T3(a) N3(a) M0.

For the moment, this would be through the following:  $\Omega$  **(n): TNM**, where  $\Omega$  would together with the help of **(n) and the (:)** be the generic name for any type of tumour or similar and have numeric (n) suffix(es) for each of those described to-date, that could be enriched by the degree of the histopathology of the tumour, by qualifying it using the corresponding Roman numeral from I to IV. For example, in our clinical case was Number 1, to which we have adjudicated representation of undifferentiated carcinomas, it can be represented by:



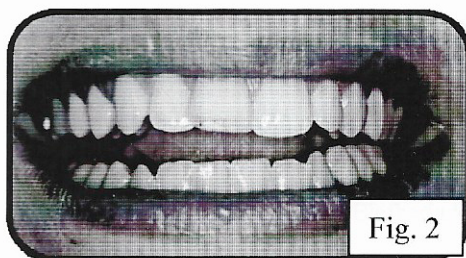


Fig. 2

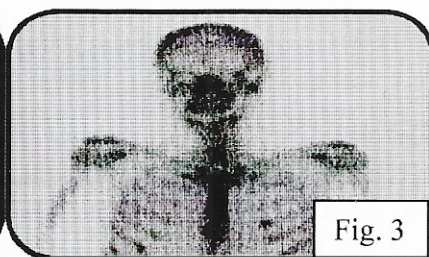


Fig. 3

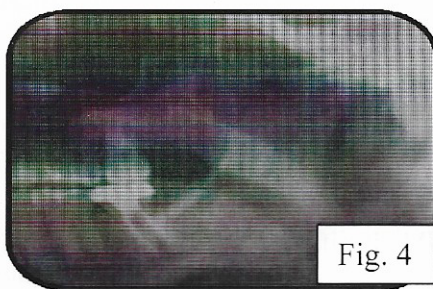


Fig. 4



Fig. 5

$\Omega$  (1) undifferentiated carcinoma IV T3 left hemitongue (a) N3 left cervical (a) M0

A second case (Figs.2-5) corresponds to a primitive breast carcinoma which metastasised in the left mandibulotemporal region and the cranial vault. The therapeutic decision according to traditional TNM (T4N3M1), under our proposal as surgeons, would be a **T4(i) N3(i) M1(i)** – dependent on whether radiotherapists or clinical oncologists ask for surgery at a specific moment, that is if they can think of the timely help of surgery in some of the tumour areas in the affected patient at some point in the chemo-radiotherapy process.

We would dare to point out the need for the existence of “**an independent medical professional**” within the Tumour Committees or in the Surgical Oncology Services. This would be someone who knows what the specialities involved in this therapy can offer and who, seeing the special circumstances of the particular clinical case, explains to the patient and the family the benefits and drawbacks of one or another therapy so that, in the end, the fully-informed (without bias) patient is the person who makes the decision.

This decision could be reflected in the clinical history using our formulae:

**T(a) or (i) N(a) or (i) M(a) or (i)** and/or  $\Omega(n)$ : **T(a) or (i) N(a) or (i) M(a) or (i)** in the following form, noting the capitals **S** (Surgery), **R** (Radiotherapy) and **C** (Chemotherapy) in front of the chosen formula. If two of the specialities are going to work almost simultaneously, their initials would be placed in front of the formula.

For example, in a surgical decision of a **T3(a) N3(a) M0**, the formula would be **S=T3(a) N3(a) M0**. If the therapeutic decision for a case: **T3(i) N3(i) M1**, had been to apply chemo-radiotherapy, the formula would be: **CR=T3(i) N3(i) M1**.

If this is a recurrence, we would represent this with the letter “**R**” at the begin-

ning of the formula, e.g. **R=T4N4 M0**. Besides, there could be cases not considered candidates to receive conventional treatment but exclusively palliative. This can be represented as:

**STOP=SRC TNM**

**STOP=SRC T(a) or (i) N(a) or (i) M(a) or (i)**

**STOP=SRC  $\Omega(n)$ :T(a) or (i) N(a) or (i) M(a) or (i)**

## Discussion and Conclusions

Until the Health organizations and Medical Societies have clearly defined the parameters involved, adapting them to our  $\Omega(n)$  with a generic tumour type classification, dedicating the pertinent "digits" for each of the recognised tumour pathologies, the clinician with immediate practical application goals should avoid this "inconvenience" by inserting the histopathological definition in the content of  $\Omega(n)$ . With our proposal we wish to make some contributions towards achieving an early agreement among specialities and to achieve a *functional oncology as smooth as possible for the patient*. We wish to recommend our readers to go over Belleannée<sup>1</sup> paper to see whether we are truly obliged to update the renowned (TNM).

The aim is not to modify the existing TNM classification, but to contribute with a new procedure to help in the clinical and therapeutic decision making. We could do no less than continue to contribute changes that are, perhaps, of interest to the much admired TNM in 2009, more than 69 years after its conception.

## References:

1. Belleannée G. Le système TNM: 3 lettres pour un langage ruche mais parfois ambigu. *Ann Pathol* 2006;26:435-44. French.
2. Hernández Montero E. Factores pronósticos epidemiológicos, clínicos, anatomopatológicos y moleculares en el cáncer epidermoide faringo-laríngeo localmente avanzado dentro de un protocolo de tratamiento multidisciplinar con quimioterapia, radioterapia y cirugía. [Doctoral thesis] 2005.
3. Hernández Altemir F, Castillo Escandón R. Disección radical de cuello. Una modificación en su técnica. *NM Especial Domingo*. 1973;1(5). Spanish.
4. Hernández Altemir F, Castillo Escandón R. Una modificación en la técnica de MacFee para la disección radical de cuello. *NM Especial Domingo*. 1974;2(6). Spanish.
5. Hernández Altemir F. Un caso de angiofibroma juvenil gigante de cávum intervenido por la técnica de desarticulación temporal pediculada a mejilla del maxilar superior. *Estoma*. 1982;2(1):41-58. Spanish.
6. Hernández Altemir F, Hernández Montero S, Hernández Montero E, Clau Terre F, Hernández Montero S, Moros Peña M. Preserving the Organ. *Journal Of Cranio Maxillofacial Surgery*. 2008 Sept;36 Suppl 1.
7. Hernández Altemir F, Hernández Montero S, Hernández Montero E, Hernández Montero S, Moros Peña M. Poor Differentiated Carcinoma: Regaud's Lymphoepithelioma. From the branches to the trunk. *Journal Of Cranio Maxillofacial Surgery*. 2008 Sept;36 Suppl 1.
8. Hernández Montero S, Hernández Altemir F, Hernández Montero E, Hernández Montero S. Maloclusión de Origen Oncológico Condilar. *Revista española de Cirugía Oral y Maxilofacial*. 2009 July;31 Suppl 1. Spanish.
9. Hernández Montero S, Otero Ramos L, Ghobadiaski F, Sánchez Cañizares T, Velasco Bohórquez P, Hernández Altemir F, Moros Peña M. Benign Fibrohistiocytoma of the oral

- mucosa: A case Report. *Journal Of Cranio Maxillofacial Surgery*. 2008 Sept;36 Suppl 1. International Union Against Cancer *Atlas TNM*. Illustrated guide to TNM/pTNM classification of malignant tumours. 4th edition. For the Spanish edition and translation: Springer-Verlag Heidelber (1997).
10. Montero EH, Trufero JM, Romeo JA, Terré FC. Comorbidity and prognosis in advanced hypopharyngeal-laryngeal cancer under combined therapy. *Tumori*. 2008 Jan-Feb;94(1):24-29.
  11. Papadogeorgakis N, Petsinis V, Eleftheriades E, Dimtsas S, Protopappa D, Alexandridis C. Large olfactory (esthesioneuroblastoma) surgically treated with an Altemir technique modification: a case report. *Oral Maxillofac Surg* 2009 Sep;13(3):171-5.