

## Gastric Cancer Staging-Critical Analysis of the Lymph Node Involvement

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### ABSTRACT

The new 2009 UICC classification of lymph node involvement in gastric cancer, also adopted by the JGCA changed the number of invaded lymph nodes and also increased the number of stages from 6 to 8. Although its usefulness in operated patients it not provide an exact stage in non-operated patients and also does not stimulate adequate training and careful handling of the specimens.

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**Key words:** Gastric cancer; Lymph nodes; Stage

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### INTRODUCTION

Stomach cancer staging has generated some controversy in the last few years. The methodology used by the International Union Against Cancer (UICC) differs from that used by the Japanese Association (JGCA) and the International Gastric Cancer Association (IGCA).

The UICC published the 7th Edition of the TNM Classification in 2009, containing the new guidelines for stomach cancer staging. Aiming to try to speak a unified language, JGCA adopted the 14th Edition of the Japanese Classification and Treatment Guidelines for Gastric Cancer in 2010, the same occurring with IGCA in 2011. In these editions, the norms are exactly the same as those adopted by UICC. The changes in the classification T and N brought an increase in the number of stages from 6 to 8, which, in our view, do not facilitate the task of classifying and studying the prognosis<sup>1,2</sup>.

In relation to the lymph node involvement (LN), UICC has used the number of compromised lymph nodes as a parameter to assess lymph node involvement for many years, whereas JGCA and IGCA until 2010 used the concept of involvement by distance, that is, the farther from the primary tumor, the greater the stage N. The new norms, also adopted by IGCA, alter the number of compromised lymph nodes; thus, N1 which corresponded to up to 6 compromised LN is now: N1-1 to 2 compromised LN, N2, 3 to 6. The N2 involvement, which ranged from 7 to 15 LN, was also modified and is now N3a, while the involvement of more than 16 LN, which was N3, is now N3b.

The numerical classification has shown itself to be very efficient since its inception, whose elaboration was also contributed to by the Japanese surgeons, but made, and makes, use in the very conceptualization of concepts relative to distance, allowing for the existence of regional and distant lymph nodes. This model in itself already allows that the larger distance is a criteria for greater gravity. In addition, controversies are generated once the tumors in the superior third are analyzed, in which there is commonly the invasion of lymph nodes which are at the height of the diaphragm (groups 19 and 20) and above it (110, 111, 112). Let us take as an example a patient with a proximal tumor, T2 with the involvement of just 1 LN of the group 110. These LN would already be classified as metastases (M) in this individual and therefore, a stage IV. On the other hand, this same tumor with infradiaphragm involvement of 1 LN of group 19, would belong in a much lower stage-II A. What may be gleaned from this example in particular is that the distance actually does influence the prognostic and the staging.

Two recent studies showed different results in the analysis of the new classification. While Kikuchi et al found no advantages, Wang *et al* concluded that it was more effective<sup>3,4</sup>. After analyzing 208 cases at our service, our initial impression is that there are no changes.

Another concern is that, as the only parameter for the invasion of the LN is the number, it will be more difficult to convince the surgeons and pathologists of the West to carefully separate the lymph node stations. In our point of view, we will have an enormous setback in the Japanese surgeons' exhaustive and careful work in teaching the Japanese technique and classification in the West. In addition, despite the 3rd IGCA Classification having well defined lymphadenectomies, D1, D1+ and D2, who can guarantee that they will be effectively done if the surgeons do not carefully separate the lymph node groups? As

previously cited by the Professor P. Hermanek himself, starting from a topographic classification we can always reach the numerical, but the inverse will not be possible<sup>[5]</sup>.

In spite of supplying an acceptable, and apparently more objective, more available classification, the new methodology is not very useful preoperatively and in unresectable cases for diverse or several causes, including for poor clinical conditions, thus putting aside an enormous number of patients who will not be well staged<sup>[6]</sup>.

The IGCA, led by Professor Takeshi Sano, initiated in 2011 an international study at various services in different countries, both in the East as in the West, to evaluate the advantages and disadvantages of this new methodology. The topic deserves a more profound analysis and we await the results with serenity.

Finally, it is important that we do not become fixated exclusively on numbers and lose sight of the experience acquired over dozens of years at innumerable services by hundreds of surgeons, with a huge number of cases. Lastly, Roy Geenhalgh's phrase defines well what we want to say: "perception and practice go before the evidence".

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