

Clinical, analytical and histological factors relating to patients diagnosed with lung cancer, head and neck cancer and melanoma treated with immunotherapy in the last 5 years of a university hospital

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Abstract

Introduction: Immunotherapy has revolutionized cancer treatment and is especially demonstrated in lung cancer or melanoma, thanks to the inhibition of immune checkpoints. There are clinical and analytical parameters such as NLR, PLR, and tumor location that can help predict response and toxicity.

Objectives: With this work we seek to identify new simple clinical factors to measure in clinical practice that help us predict response, survival and toxicity

Methods: A descriptive study of 44 patients treated with Nivolumab and diagnosed with lung cancer (n = 6), head and neck cancer (n = 22) and melanoma (n = 16) was carried out at the Hospital Universitario de Fuenlabrada in the last 5 years (2015-2020). Clinical, analytical, histological and radiological variables of the population were analyzed at diagnosis, as well as the different treatments received.

Results: Immunotherapy has revolutionized cancer treatment and is especially demonstrated in lung cancer or melanoma, thanks to the inhibition of immune checkpoints. With this work we seek to identify new simple clinical factors to measure in clinical practice that help us predict response, survival and toxicity.

Introduction

In our study, the location of the tumor and the line of treatment were the main determining factors. In the consulted bibliography we also observed this relationship, although it is true that the sample used in our study was heterogeneous, since we do not have the same number of patients for each tumor.

The drug studied was Nivolumab, which does not obtain the same response in all tumors, since its mechanism is the specific blockade of the PD-1 / PD-L1 pathway, so it does mark a change in treatment. of lung cancer, which expresses this mutation more frequently, but not so much in melanoma and head and neck cancer [1].

The toxicity of the treatment was taken into account from grade 1, differentiating the type, and it was present in 52.3% of the patients. Despite this, 97.7% (n = 43) complied with the IT dose at 100%, only 1 patient suspended therapy due to its toxicity, which was hepatic.

In the univariate analysis of the response, tumor location, toxicity and line of treatment behaved as main determinants of response to TI, with only the latter remaining in the multivariate [2].

Regarding the factors that influenced survival were the patient's age, the response to IT treatment, as well as the NLR and PLR ratios. In the multivariate analysis, the PLR and response to treatment variables remained [3].

With regard to toxicity, this can be considered as a good prognostic factor, statistically significantly reducing the death rate in those patients who presented toxicity.

Conclusions

The mean age was 62 years (33-81). Of the patients who presented toxicity, in 38.1% (n = 8) it was cutaneous, and in the remaining diarrhea, liver toxicity, asthenia, endocrine toxicity in equal parts. Only 1 patient (2.3%) had pneumonitis as a form of toxicity.

Regarding the response, the variables that resulted with a p <0.02 and that remained in the multivariate were tumor location, toxicity, and line of treatment.

Regarding toxicity, the variables that resulted with a p <0.02 and that remained in the multivariate were the treatment line, the tumor stage, and the NLR and PLR ratios.

Regarding survival, the variables that resulted with a p <0.02 and that remained in the multivariate were the response to treatment, toxicity, and the NLR and PLR ratios.

References

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