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## LETTER TO THE EDITOR

**Critically ill patients infected with HIV: 15 years of experience****Pacientes críticos infectados por VIH: 15 años de experiencia***Dear Editor,*

Infection with the human immunodeficiency virus (HIV) constitutes one of the main public health problems in the world. The use of prophylaxis against opportunistic infections and, especially, the introduction of highly active antiretroviral treatment (HAART) in late 1996 has increased the life expectancy of these patients and has eventually been followed by a marked decrease in the morbidity and mortality associated with this disease<sup>1,2</sup>.

We have carefully read the article published by P. Vidal-Cortés et al.<sup>3</sup> and we want to congratulate the authors for such a large and important series of patients studied. One of the limitations referred to in the original article is the difficulty in generalizing the results, since it was only performed in the ICUs of two hospital centers. Given this, we wish to contribute our experience in a work in which we obtained similar results to those presented by the authors and that we published in the XLVII SEMICYUC National Congress eight years ago<sup>4</sup>.

Our series of patients was also analyzed and studied retrospectively over a period of 15 years (1995–2009). During this period of time, 188 HIV patients were admitted to the ICU, representing 1.5% of total admissions. Of all the different variables analyzed, we believe that perhaps we should stick to the fact that the first three causes of admission were respiratory failure, neurological pathology in relation to coma due to toxic consumption and septic shock. 16.5% of the patients were unaware of the infection at the time of admission, 44% did not receive HAART. In the group of patients in whom HIV infection was not known, 93.5% were admitted due to pathology related to it, while in the group of patients with known infection, the admission pathology was not related to the disease in 70%.

We recognize that there are two databases with enormous potential for epidemiological and clinical information that undoubtedly provide a large number of conclusions. Like the authors, we share the opinion that the use of therapeutic resources offered in ICUs for HIV-infected patients has been a matter of controversy since the first cases of the disease were described, sparking great medical debate, ethical and economic in relation to the application of criti-

cal therapy to these patients. However, the introduction of HAART has not only significantly improved the quality of life and survival of the patients as mentioned above, but has also changed both the reason and the criteria for admission to these Units.

Therefore, we wish to support and consolidate the conclusion that people with HIV infection can and should benefit from the reasonable and individualized use of care in an ICU where they receive all the necessary measures for its stabilization and treatment. The correct information to the patient and his family, together with the adequate evaluation of each individual patient, the stage of the disease, the reason for admission and the accompanying medical factors should be considered as determining the attitude of the Intensivist.

**Author's contributions**

Alexander Agrifoglio conceived the letter and drafted the manuscript. Lucía Cachafeiro, Mónica Hernández and Abelardo García de Lorenzo drafted the manuscript. All authors read and approved the final manuscript.

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**Competing interests**

The authors declare that they have no competing interests.

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## Reply to "Critically ill patients infected with HIV: 15 years of experience"



## Respuesta a "Pacientes críticos infectados por VIH: 15 años de experiencia"

Dear Editor,

We thank Dr. Agrifoglio et al. for their comments, which come to complement and reinforce our conclusions.<sup>1</sup> There is currently no discussion that the decision for admission to the ICU of patients infected with HIV, as in other patients with other chronic diseases, should be individualized and that a large percentage of these patients may benefit from intensive treatment, including all necessary support measures.

Although, apparently, the reasons for admission in our series seem different, both coincide in pointing out the importance of receiving or not receiving HAART at the time of admission, in addition to being aware of the infection or not, not to predict the prognosis, but as an aid to establish the diagnosis of the pathology that causes ICU admission. Agrifoglio et al. report that 70% of patients who were aware of their infection were admitted due to a non-AIDS-related pathology and we observed that sepsis caused 63% of ICU admissions in patients who were not receiving HAART.<sup>2</sup>

As we say, HIV infection has become a chronic disease, but that does not mean that its study within critical pathology has lost interest, as evidenced by two recent reviews published in high impact journals.<sup>3,4</sup> Both summarize the differential diagnosis, based on the immunological status, of the main reasons for admission to the ICU of these patients: acute respiratory failure and altered consciousness, which can be challenging, especially in the most immunosuppressed patients. Another unresolved challenge they address is identifying the best time to start antiretroviral treatment, especially in patients who do not receive it and who are admitted to the ICU as a consequence of an opportunistic infection. In the reviews mentioned above, the authors give their expert recommendation and suggest that this is a possible area of research for the future.

Like Agrifoglio, the two reviews mention the importance of improving the knowledge of the outcome of these patients, they are more focused on the impact of ICU

admission on the long-term outcome and Agrifoglio et al. is more focused on the selection of which patients will benefit from more aggressive measures. Even when we analyze the cohort studies published since 2005 (as Azoulay et al. did), we find that ICU mortality varies from 14 to 66%, a margin too wide to make decisions and inform the patient or family of the chances of survival. As Agrifoglio et al., who mention the combination of the stage of the HIV infection, the reason for admission and the accompanying medical factors to better predict the outcome, we believe that the combination of demographic variables, comorbidities, nutritional and immune status, reason for admission, and need for organic support in the first 72 h of admission could be useful in developing a prognostic score that predicts hospital mortality.<sup>5</sup>

## Conflict of interest

The authors declare no conflict of interest.

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