



## SCIENTIFIC LETTER

### Concordance between the oncologist and the intensivist in the decisions of aggressive measures in cancer patients<sup>☆</sup>



### Concordancia entre el oncólogo y el intensivista en las decisiones de instauración de medidas agresivas en el paciente oncológico

To the Editor,

Recently, the Spanish Society of medical Oncology (SEOM) and the Spanish Society of Intensive and Critical Care Medicine and Coronary Units (SEMICYUC) signed a collaboration agreement to improve the quality of care of cancer patients with critical complications.<sup>1</sup>

In this context, we wanted to conduct a comparative study to analyze the level of agreement reached between the oncologist's assessment of patients admitted to the oncology unit and the assessments made by the intensivists of a tertiary hospital.

To that end, a cross-sectional study was conducted periodically every Monday for the next 6 consecutive weeks looking for patients recently admitted to the oncology unit with assessments of the aggressive measures received in case of clinical worsening. The patients recruited were presented as clinical cases to 3 intensivists of different ages, experience working at the unit, and labor status. From the 3 intensivists' assessments a consensus decision was reached in the cases assessed that was compared to the oncologist's decision. In order to assess the inter-observer concordance, the Cohen's kappa coefficient was used. *P* values < .05 were considered statistically significant.

A total of 66 patients admitted to the oncology unit were recruited during the study period. The patients' clinical history included the decision to consider the patient eligible for aggressive measures in 19 cases (28.78%). The oncologist considered that 16 of these patients (84%) were eligible to increase the aggressiveness of the treatment received, when applicable. In 68.4% of the cases the decision made by the oncologist coincided with the one made by the intensivists. The Kappa coefficient established a value of weak concordance of 0.34 (95%CI, 0.18–0.67; *P* = .047).

Although with evident limitations given the small size of the sample, this study shows a very discrete level of agreement between oncologist and intensivist in the increased therapeutic measures implemented. On the other hand, it also shows significant weaknesses like the fact that it assessed the implementation of aggressive measures without previously establishing what would be considered an «aggressive measure» or the context where it would be implemented. That is, whether the study complication was associated with the oncological activity *per se* or not.

However, the singularity and originality of the study is that it reveals the actual need for reaching collaborations between oncologists and intensivists to improve the quality of care of cancer patients with critical complications, not only on the technical level but also on the ethical considerations surrounding these situations.

A recent systematic review of the medical literature available in the field of study that excluded studies conducted before 2000 revealed that there seems to be a major inconsistency between the preferred place to die and the actual place of death among these patients.<sup>2</sup> ICU admissions at the end of life in cancer patients can be justified to treat potentially reversible disorders in some cases. However, a significant number of these admissions can be considered potentially inappropriate if we take into account that approximately half of all ICU admissions of cancer patients result in death.<sup>3</sup> Nevertheless, we should remember that, currently, in our setting, only a third of the patients with serious oncological disease who require ICU admission die while hospitalized. Also, more than half of the survivors show are in a situation of independence upon hospital discharge.<sup>4</sup>

Therefore, the problem here is deciding what cancer patients are more eligible to benefit from ICU care. Our

<sup>☆</sup> Please cite this article as: Escudero-Acha P, Peñasco Y, Rodríguez-Borregan JC, Cuenca Fito E, Ferreira Freire L, González-Castro A. Concordancia entre el oncólogo y el intensivista en las decisiones de instauración de medidas agresivas en el paciente oncológico. *Med Intensiva*. 2021;45:246–247.

results, with the limitations already described, pave the way for actually working on recommendations and protocols to facilitate the decision-making process in this setting. These tools have proven capable of preventing up to 40% of all inappropriate ICU admissions among these patients.<sup>5</sup> Also, we think collaborative work to develop advanced directives in this type of patients is of paramount importance. However, in other settings, after controlling malignancy these advanced directives did not anticipate the reason for ICU admission, disease severity, age, and decision to start life-support therapies in patients with and without such directives. However, the presence of an advanced directive may have helped guide prior decisions on the duration of therapy and state of resuscitation.<sup>6</sup>

In this context, back in 2017, SEOM and SEMICYUC signed an agreement to improve the quality of care of cancer patients with critical complications. This initiative aims at contributing to the decision-making process, standardizing criteria, reducing subjectivity, generating channels of communication, and going deeper into the ethical and scientific aspects of these situations. Cancer drugs, chemosensitive tumors, presence of mutations predictive of response to targeted therapies, possibility of long-term tumor control with immunotherapy, and other specific situations should make us be able to agree on what patients are eligible for ICU admissions based on their distinctive characteristics.<sup>7</sup>

## Funding

No funding was received whatsoever.

## References

1. Sociedad Española de Medicina Intensiva y Unidades Coronarias (SEMICYUC). Convenio de colaboración SEMI-

CYUC y SEOM. [consultado 5 Jul 2019]. Available at: <https://semicyuc.org/convenios-de-colaboracion/>.

2. Nilsson J, Blomberg C, Holgersson G, Carlsson T, Bergqvist M, Bergström S. End-of-life care: where do cancer patients want to die? A systematic review. *Asia Pac J Clin Oncol*. 2017;13:356–64.
3. Thiéry G, Azoulay E, Darmon M, Ciroidi M, De Miranda S, Lévy V, et al. Outcome of cancer patients considered for intensive care unit admission: a hospitalwide prospective study. *J Clin Oncol*. 2005;23:4406–13.
4. Díaz-Díaz D, Villanova Martínez M, Palencia Herrejón E. Oncological patients admitted to an intensive care unit. Analysis of predictors of in-hospital mortality. *Med Intensiva*. 2018;42:346–53.
5. Nasir S, Muthiah M, Ryder K, Clark K, Niell H, Weir A. ICU deaths in patients with advanced cancer: reasonable criteria to decrease potentially inappropriate admissions and lack of benefit of advance planning discussions. *Am J Hosp Palliat Care*. 2017;34:173–9.
6. Kish Wallace S, Martin CG, Shaw AD, Price KJ. Influence of an advance directive on the initiation of life support technology in critically ill cancer patients. *Crit Care Med*. 2001;29:2294–8.
7. Carmona-Bayonas A, Gordo F, Beato C, Castaño Pérez J, Jiménez-Fonseca P, Virizuela Echaburu J, et al. Intensive care in cancer patients in the age of immunotherapy and molecular therapies: commitment of the SEOM-SEMICYUC. *Med Intensiva*. 2018;42:363–9.

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## Analysis of SARS-CoV-2 in the air of an ICU dedicated to covid-19 patients<sup>☆</sup>



## Análisis de SARS-CoV-2 en el aire de una UCI dedicada a pacientes covid-19

Infection due to SARS-CoV-2 produces pneumonia and acute respiratory distress syndrome in the context of a disease known as COVID-19.<sup>1</sup> In only a few months, the virus spread throughout the world, infecting millions of people and causing hundreds of thousands of deaths.<sup>2</sup> Contagion takes place through respiratory droplets (>5 μm) and contact with con-

taminated objects (fomites).<sup>3,4</sup> Recently, the World Health Organization (WHO) has acknowledged that airborne transmission through aerosols (<5 μm) that remain in the air for hours is also a possible contagion route, due to the inhalation of viral particles that are deposited within the distal airway.<sup>5–7</sup> Airborne transmission is of great relevance to public health and the protection of healthcare professionals, and in this regard the measures of caution need to be modified to avoid contagion—incrementing the required 2 m safety distance, particularly in closed areas or spaces.

Intensive Care Units (ICUs) have periodic air renewal mechanisms, and during the pandemic, many Units were equipped with negative pressure systems. However, other places such as homes, restaurants, public transport or even hospital wards have no such safe ventilation systems. Some studies have reported that SARS-CoV-2 is able to remain in the air generated by aerosols for up to three hours,<sup>7</sup> with demonstration of the presence of the viral genome in the air and filters of hospitals.

<sup>☆</sup> Please cite this article as: Escudero D, Barrera JA, Balboa S, Viñas S, Martín G, Boga JA. Análisis de SARS-CoV-2 en el aire de una UCI dedicada a pacientes covid-19. *Med Intensiva*. 2021;45:247–250.