



Letter to the Editor

Multidisciplinary consensus, is anyone missing?*



Consenso multidisciplinar, ¿falta alguien?

To the Editor:

We were interested to read the multidisciplinary consensus for the management of pulmonary embolism (PE) published online in Archivos de Bronconeumología in 2021¹. This is a convincing piece of work that concurs with other current European and American consensus documents. However, from the perspective of Interventional Radiology, we would like to make some clarifications regarding fibrinolytic treatment for the management of massive and submassive PE.

The effects of full-dose systemic fibrinolysis on the reduction of mortality are well known, but this approach leads to an increase in the risk of major bleeding (intracranial hemorrhage) which can be as high as 9.2% when anticoagulants and fibrinolytics are used in combination². In recent years, studies of considerable methodological value have reported and analyzed the impact of pulmonary thrombectomy plus local fibrinolysis on clinical improvement and reduction of mortality due to massive and submassive PE^{3,4}. These studies also highlight the significant reduction in the risk of major bleeding achieved by limiting the thrombolytic dose when it is administered locally via catheter-directed administration, the dose being delivered through the catheter itself^{3,4}. However, it is worth pointing out that the recommendation of systemic over local fibrinolysis is based on the article by Verstraete et al.⁵ who published a comparative study in 1988 in 34 patients with massive PE, in whom intra-arterial (pulmonary artery) and systemic intravenous rt-PA were administered with similar results. This comparison no longer makes sense, since local fibrinolysis is always delivered intra-thrombus, simultaneously with fragmentation or aspiration of the thrombus. Therefore, we believe that with the current state of knowledge, intra-arterial local fibrinolysis cannot be restricted to patients with relative or absolute contraindication for systemic fibrinolysis in massive or submassive PE, because although the improvements achieved are similar, the risk of bleeding is drastically reduced.

In the PERFECT registry³, a prospective, multicenter American study in 101 patients treated with catheter-directed therapy, clinical success was achieved in 85.7% of patients with massive PE and 97.3% with submassive PE, with no major bleeding complications. Although this study clearly does not provide the strength of evi-

dence of a randomized study, in our opinion it should carry weight in therapeutic decision-making in a disease that continues to kill.

Randomized studies comparing the immediate outcomes, complications, and costs of one technique with another (systemic fibrinolysis vs. fibrinolysis plus mechanical thrombectomy or aspiration) are needed. Finally, we must emphasize the importance of forming multidisciplinary teams in which emergency physicians, intensivists and anesthesiologists, radiologists, pulmonologists, and interventionists play an important role, since without their support, the overall management of severe pulmonary embolism would be impossible.

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