

Forward to Victory Over COVID-19!?

Igor Klepikov*

MD, Professor, Retired, USA

***Corresponding Author:** Igor Klepikov, MD, Professor, Retired, USA.

Received: April 11, 2021; **Published:** May 31, 2021

Commentary to article: Ahmed N Ghanem (2021). The War on Covid-19 Pandemic ARDS Should and Must End the Lockdown Triumphantly Soon: Only Utter Stupidity May Prevent or Prolong that. *EC Emergency Medicine and Critical Care* 5.4 (2021): 112-120 [1].

First of all, I must frankly admit that this is the first time I have had the opportunity to read such a non-standard article in a scientific medical journal. The firm promise of imminent and rapid success in the fight against the SARS-CoV-2 pandemic, the peremptory confidence in the stated theoretical justifications for solving the problem, contrast with standard scientific publications, including articles that have a wide and recognized popularity. I am deeply convinced that if the plans proposed by the author could be implemented, it would indeed be a great success, but, unfortunately, the rationale for such therapeutic approaches does not stand up to criticism and only increases the risk to patients.

The essence of the proposal is to revise the principles of intravenous infusions for the prevention of volumetric overload shock and subsequent acute respiratory distress syndrome (ARDS). In previous years, performing transurethral resections of the prostate gland, the author drew attention and proved on his own material that these patients often receive an excess of isotonic solutions, which leads to the above-mentioned complications. Prevention of such severe complications according to the author's materials is possible with the help of infusion of hypertonic solutions, 5% sodium chloride and 8.4% sodium bicarbonate. Having positive results of this technique among urological patients, the author draws a complete analogy with a group of severe patients who appeared during the SARS-CoV-2 pandemic. From my point of view, it is good that this proposal is still theoretical in nature and has not passed into the stage of clinical trials that the author calls for.

First, shock is not an independent nosology, acting as a complication of many pathological conditions and has its own classification depending on its causes [2]. ARDS (according to the old terminology "shock lung") is a consequence and pathognomonic sign of shock of any etiology, including the root causes in the lung itself. Despite the similarity of many parameters with different origins of shock, it should be divided into two fundamentally different groups-pulmonary and extrapulmonary, which is important for understanding the features of pathogenesis and treatment methods.

Secondly, it is now generally accepted that the main problem in the SARS-CoV-2 pandemic is the development of viral pneumonia, which determines the statistics and the final results of this disaster. In this regard, it is fundamentally important to note that the patients from the author's observations did not have this problem, since it is an absolute contraindication for the planned urological interventions in question.

Third, it should be remembered that COVID-19 pneumonia is accompanied by classic signs of acute inflammation, which include increased vascular permeability in the affected area with increased edema and infiltration of lung tissue. In this situation, any intravenous

infusion must first reach the affected area, stimulating the above mechanisms. By the way, this type of liquid therapy began to be used in patients with acute pneumonia automatically by analogy and experience in the treatment of other diseases. Negative results of this “analogy” have been investigated and published, but so far this method continues to be used in this category of patients [3].

Fourth, the features of the pathogenesis of primary lung damage are due to the specifics of the localization of the process in the general circulatory system, which fundamentally distinguishes it from other diseases. The mechanism of shock in acute pneumonia is radically different from a similar catastrophe in other shockogenic causes [4]. The inextricable connection and interdependence between the small and large circulatory circles, as well as the opposite functional parameters of each of the halves of the circulatory system, are well known and underlie the unique pathogenesis of pulmonary shock. In this regard, the causes and mechanisms of shock after transurethral resection of the prostate are not identical to this complication in acute inflammation in the small circle of blood circulation, but, as in the first variant, this complication is not septic.

Finally, any pathological process has its own stages of development, which are based on a causal relationship between the observed disorders. Shock and ARDS in this chain of disease mechanisms will always mark one of the preterminal stages and the very fact of their development will reflect the shortcomings of previous treatment. At the same time, the pathogenesis of each of the shock variants is the key to choosing pathogenetic care, and one treatment method for different shock variants can give exactly the opposite effect.

The comments provided are based on known facts and patterns inherent in biological objects that have already been discovered and studied. These rules apply regardless of our beliefs and interpretations. The role and significance of this information in the treatment of patients with aggressive acute pneumonia were later confirmed and proved by special studies and clinical trials [5].

The problem of treating patients with COVID-19 pneumonia, as strange as it may sound, was formed long before it occurred. The long-standing practice of treating completely incomparable diseases with a single antibiotic has completely distorted the understanding of the nature and mechanisms of acute pneumonia. As the effectiveness of antibiotics decreased and the proportion of viral forms of lung diseases increased, the need for additional care products that were used on the basis of “analogies” and the results of treatment of other diseases increased. Therefore, the essence of this problem is not in the composition of infusion media, but in their danger in acute inflammation of the lung tissue. In order to speed up the solution of this problem, it is necessary, first of all, to bring the concept of disease in line with the basic provisions of medical science. Meanwhile, the announced triumph is postponed.

Bibliography

1. Ahmed N Ghanem. “The War on Covid-19 Pandemic ARDS Should and Must End the Lockdown Triumphantly Soon: Only Utter Stupidity May Prevent or Prolong that”. *EC Emergency Medicine and Critical Care* 5.4 (2021): 112-120.
2. Shock (circulatory).
3. Igor Klepikov. “The Effect of Intravenous Infusion on the Dynamics of Acute Pneumonia”. *EC Pulmonology and Respiratory Medicine* 4.1 (2017): 15-20.
4. Klepikov I. “Acute Pneumonia is More Cardiovascular than a Respiratory Disaster”. *Journal of Emergency Medicine and Care* 1.1 (2018): 105.
5. Igor Klepikov. “Acute pneumonia. New doctrine and first treatment results”. Lambert Academic Publishing, (2020).

Volume 5 Issue 6 June 2021

©All rights reserved by Igor Klepikov.