

Predetermined and Inevitable Questions When Solving the Problem of Acute Pneumonia

Igor Klepikov

Professor Renton, Washington, USA

Corresponding author

Igor Klepikov, Professor Renton, Washington, USA.

Received: July 25, 2024; **Accepted:** August 02, 2024; **Published:** August 05, 2024

Half a century has passed since the author of these lines, at that time a young aspiring surgeon, found himself in a situation that required not only extreme physical capabilities and endurance, but also extreme emotional stress. The situation in an industrial city with a population of more than half a million people and a large number of aggressive forms of acute pneumonia (AP) with high mortality rates forced healthcare leaders to take extreme, unprecedented measures. Patients with severe development of AP, immediately after the initial diagnosis was established, were sent to a surgical hospital, the profile of which was not related to this disease. Such a non-standard decision was made because here was the only opportunity to provide qualified resuscitation care to such patients, many of whom needed it.

If you have the impression that such an organizational step has solved the problem that has arisen, then you should not create illusions and imagine that continuing the previous principles of treating this category of patients in conditions of better provision of auxiliary care may be of decisive importance. A similar example of the concentration of patients in specialized departments could be seen recently, at the peak of the pandemic. Similar departments, created in different countries for anti-epidemiological purposes, accept patients with pneumonia caused by Covid-19. The concentration of a large number of seriously ill patients, whose condition can quickly and unpredictably deteriorate, reaching critical situations, is a heavy physical and psychological burden for medical personnel. The real result of working in such departments - depressive states and a feeling of hopelessness-could be noted during the pandemic, when unusual confessions of specialists who took part in the treatment of such patients appeared in the periodical medical press [1-4].

The states described in the presented publications remind the author of his own impressions and sensations, which still remain a

sensory reminder of the events experienced, despite the passing decades. However, an event of this nature, in addition to the inevitable passive reaction, can become a stimulus for active action. An ancient postulate states that if therapy does not bring the expected result, then such treatment does not correspond to the nature of the disease. The second rule, which came from ancient times, teaches that if the situation has reached a dead end, then in search of a way out one should start all over again, including, preferably, one's own ideas about the object or phenomenon being studied. Such prescriptions require a mandatory radical revision of the principles of modern medical care for patients with AP. It was this approach to solving the problem of AP that allowed the author to note misconceptions in professional ideas about the nature of the disease and obtain convincing evidence and excellent clinical results of pathogenetically based therapy [5].

Currently, the materials of this work are quite widely presented in numerous publications, but the evidence base of such articles does not have a noticeable impact on the widespread dissemination of the existing concept of the disease. This state of affairs is explained not only by the extremely slow pace of change, which, even in the case of convincing refutations, changes deeply ingrained ideas of public opinion. As you know, passively receiving ready-made information is a less convincing and reliably perceived fact compared to information that we receive by spending our own efforts on it. Therefore, in this regard, instead of a standard and familiar presentation of materials that can be read and automatically loaded into the total amount of information received, I propose to make a little effort and answer a few simple questions. Such questions should inevitably arise in everyone who is involved in solving the problem of AP, but, as real events testify, the answers to them are not included in the list of tasks that make up the main directions of the search. The relative simplicity of the answers lies in the fact

that they logically follow from those fundamental materials that form the basis of knowledge of graduates of medical universities anywhere in the world. The essence of such questions makes it necessary to see acute inflammation of lung tissue structures in a broader panorama than just the result of the action of individual pathogens.

The list of suggested questions could be much longer, but in this case the attention is focused on the most key parts of the problem. That's what we're talking about.

1. Violation of what lung function, in addition to ventilation and diffusion, plays an important role in the development of respiratory disorders in patients with AP?
2. How does the body, without our efforts, regulate the vital proportions of the volume of circulating blood between the small and large circles of blood circulation, trying to maintain constant antagonism of blood pressure in the two halves of the circulatory system, automatically and autonomously maintaining the necessary parity?
3. Why can a small pulmonary embolism, blocking an insignificant amount of pulmonary blood flow, be accompanied by symptoms such as shortness of breath and decreased systemic blood pressure, and sometimes cause sudden death?
4. How do the manifestations of the aggressive development of AP, the inflammatory process in which begins with primary damage to the pulmonary vessels, differ from the manifestations of pulmonary embolism?
5. Why does oxygen insufflation in AP, which is of great importance today in the provision of first and emergency aid, not bring noticeable relief to the patient and does not have a significant impact on the clinical picture and dynamics of the disease?
6. Why are hemodynamic disorders in patients with AP determined by indicators of systemic circulation, which in this case, unlike other inflammatory diseases, are secondary in nature, and the source of their development is explained by the same reason as in other nosologies?
7. Why are etiotropic drugs for the treatment of AP, primarily antibiotics, considered as first aid and emergency aid for this disease, when it is reliably known that they can act selectively only on the causative agents of inflammation, without having a direct effect on the process itself and the first results of this treatments are usually expected within 48 hours?
8. What result do you expect to get from prescribing infusion therapy to a patient with AP, if it is known for sure that after their administration, infusion solutions will first reach the zone of inflammation in the lung, in which there is excessive blood supply with a slowdown in blood flow and the processes of edema and tissue infiltration due to increased vascular permeability walls?
9. If infusion therapy corresponds to the nature of the disease and is really aimed at eliminating the causes of hemodynamic disorders in patients with AP, then why do many of this category of patients need further administration of vasopressors, the introduction of which is even provided for a priori in the recommendations?

10. How do you assess the results of the SARS-CoV-2 pandemic today, if according to statistics, only about 20% of those infected required hospitalization and most of them suffered coronavirus pneumonia, despite the lack of etiotropic medical care?
11. If the causative agent of AP continues to be considered the main cause of the disease, then why does inflammation of the lung tissue, regardless of etiology, have almost the same pattern of manifestations, which in practice does not allow for reliable differential diagnosis depending on the type of pathogen ?
12. How is the specificity of the localization of the inflammatory process as a result of the loss of the corresponding body structures of their functions currently reflected in the justification and implementation of first and emergency care for patients with AP?

Each of the questions posed above is not the result of theoretical assumptions, but has a completely evidential basis for its justification. I hope that the essence of the questions posed and the wording of the answers will allow the reader to see the problem under discussion from a different angle, expanding the boundaries of existing stereotypes. If the issues raised raise doubts or objections regarding their admissibility and legality, then there are two options for obtaining additional information regarding the affected areas of the AP problem. Detailed justification and necessary evidence are presented in a recently published monograph [5]. In addition, you can write to the author at the email address listed below and state the specifics of your doubts and objections, receiving a quick and comprehensive response. The proposed form of information exchange will make it possible to make the necessary adjustments to planned research and practical support for solving this urgent problem, allowing us to see the first successes of such efforts.

This manuscript is a full initiative of the author and does not have any funding.

Conflict of interest: The Author States That he has no Conflict of Interest.

References

1. Leiter RE. Reentry. NEJM. 2020.
2. Rosenquist JN. The Stress of Bayesian Medicine. Uncomfortable Uncertainty in the Face of COVID-19. HEM, N Engl J Med. 2021. 384: 7-9.
3. Salisbury H. What might we learn from the covid-19 pandemic? BMJ. 2020. 368: 1087.
4. Oliver D. Conveyor belt medicine. BMJ. 2020. 368: 162.
5. Klepikov I. Myths, Legends and Real Facts About Acute Lung Inflammation. Cambridge Scholars Publishing. 2024. 338.