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Letter to Editor

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# Is it Possible to Create a Tablet from Pneumonia?

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## Letter to Editor

"Antibiotics alone" remain today the guiding principle of the treatment of many inflammatory diseases including acute pneumonia (AP). If this principle of treatment has produced the expected results, the discussion of this topic would not be required. However, published results show not only the negative dynamics of development of purulent complications of the AP, but also the lack of promising strategies to address this problem [1-4]. Pediatric pleural empyema has increased substantially over the past 20 years and reasons for this rise remain not fully explained [5]. In developed countries 9.5% to 42% of patients with pneumonia are accepted in hospital due to the ineffectiveness of primary treatment [6]. Nonetheless, the transfer of patients to a hospital does not improve the results of treatment. Parapneumonic effusions or empyema affect 2% to 12% of children with pneumonia, and up to 28% of those requiring hospitalization [7].

Unfortunately, modern recommendations for treatment of AP and prevention of its complications only lead to suppress microflora as the main treatment remains antibiotics. Such recommendation on administration of antibiotics was based on the belief of a predominant role of specific bacteria in the development of AP. In recent years, this threat was Streptococcus pneumoniae. However, the well-known published facts and results have not ended the debate on etiology of AP. Most of the patients with AP heal without definitive data confirming etiology of the disease. In our opinion, in the absence of concrete results, further discussions on etiology of inflammation in AP are simply groundless.

Bacteriological examination of material from the zone of inflammation becomes available in case of purulent complications. But only the results of these studies indicate the participation of the most diverse etiologic agents in AP. Scientific medicine has received the most serious blow to its reputation after years of large scale pneumococcal vaccination of the population in developed countries. Thus, a statistically significant increase in supportive complications of AP, contrary to the prediction of their decline, is still without a proper scientific explanation. Among children ≤18 years of age, the annual empyema-associated hospitalization rates increased almost 70% between 1997 and 2006, despite decreases in the bacterial pneumonia and invasive pneumococcal disease rates. Pneumococcal conjugate vaccine is not decreasing the incidence of empyema [8]. Despite decrease in pneumococcal diseases among Utah children, complicated pneumonia/empyema has increased during the 7-valent pneumococcal conjugate vaccine era; the causes on increasing rates of empyema are unclear [9].

The discovery of antibiotics was an outstanding achievement in the past century. Their practical application have saved the lives of a huge number of patients. Therefore, the importance of antibiotics in complex medical care to various categories of patients is not in doubt. At the same time, the use of antibiotics in clinical practice is such a major transformation that requires a dramatic revision of the strategy in many specific areas and revaluation of the role and place of these drugs in the set of medical care. The first stunning results of antibiotic use were so impressive that deservedly gave rise to the opinion of their exclusivity and elevated them to the rank of a panacea for many diseases. But time passed and microflora, as a biological entity, became able to adapt to this medical aggression. Antibiotics-resistant microbe strains began to appear as a natural consequence of such exposure (because the absolute sterilization of living biological world is impossible, isn't it?).

Today we already have quite a long list of such resistant strains and the list is constantly growing. The history of all these transformations has a second face: a decline in the effectiveness of antibiotics and the rise of microbial resistance to them has been a powerful incentive for pharmacologists to develop new and more active and powerful drugs. Therefore, at present it is impossible to enumerate by heart all known antibiotics. And here is exposed the dilemma, which cannot be invisible, and which requires a debate. On one hand, medical practice regularly receives new and more powerful antibiotics. On the other, updating the arsenal of antimicrobial agents does not prevent the growth of purulent complications of AP.

Currently, the image of new infectious threats arises. Respiratory viruses, rather than bacterial pathogens, were most commonly detected in children hospitalized with pneumonia. This ground-breaking study shows how badly we need faster, less-expensive diagnostic tests for doctors to accurately diagnose the cause of pneumonia so that they can effectively treat it [10]. "The results help to define the role of viruses as major players in pediatric pneumonia and shows a need for new therapies that can

reduce the severity of viral pneumonia", says Chris Stockmann, co-investigator and senior research analyst at the University of Utah. Among children diagnosed with pneumonia, viral infections were much more common than bacterial infections (73% vs. 15%), and respiratory syncytial virus (RSV) was the most commonly detected pathogen [11]. It is significant that the frequency of detection of these viruses in healthy people is not statistically different from their etiological role in acute pneumonia.

If you stick to the old approach in the treatment of AP, the new information about the etiology of the disease pushes the pharmacologists towards a new challenge: the need to develop and create unique group of antiviral drugs. It should be noted that the principles of solving the problem remains the same and changes can apply only to tactical efforts. Beginning this way will be a new round of competitive race between pathogens and pharmaceuticals. Modern treatment results in AP show that the previous round of this competition ends not in favour of the creators of the drugs. Thus, before you start intensive work in this direction, we should recall well-known facts about the nature of the AP. It is well known that pneumonia is not a contagious infectious disease and not in need of appropriate measures for the health and safety [12]. It is also common knowledge that many people are carriers of the entire spectrum of microbes that are pathogens of AP. These people feel healthy and do not need medical attention.

In other words, the presence of a microbe is insufficient for the occurrence of inflammation in the lung. Such a conclusion is not a revelation to many experts. Please note, we are not talking about such dangerous infections as plague, cholera, typhus, smallpox, etc., which can cause terrible epidemics. Today the problem lies elsewhere. Current generations of physicians are educated in respecting microflora and act in accordance with their education.

Training doctors are aware of many medical axioms, which have a scientific basis, but this knowledge does not affect their general idea about the nature of the AP. As an example, the following are some of such axioms are of direct relevance to the development and dynamics AP:

a. body response to any stimulus, including the initiation of inflammation, is highly individual and unique;

b. the basis for the inflammatory transformation of the body tissue is a vascular reaction with a specific sequence;

c. small and big circulation not only have a direct relationship, but an inverse relationship;

d. among the nonspecific forms of inflammation, AP is the only process occurring in the system of small circulation;

e. the same medical procedure can have different effects on inflammation in the small or big circulation;

Therefore, the problem of a guaranteed cure of AP and the prevention of its purulent complications should be carried out through a revision of the understandings of the mechanisms of emergence and subsequent development of the disease. However, there is another dilemma. On one hand, the new doctrine on the etiology of AP not only created and argued for more original research, but also led to excellent clinical results. A detailed description of the results of this work can be found in a published book [reference]. On the other hand, the most difficult task in the field of care for patients with AP will change existing stereotypes. The impact of the prevailing concept of AP on the mindset of a vast number of experts will be impossible to fix in a short time. This paradigm remained dominant for several decades, accompanying health professionals within their trainig and throughout their career. The obvious argument for the introduction of new educational programs on AP is the modern statistics of outcomes in these patients and complete stagnation in the explanation of failures and negative trends in these results. How much time may require such retraining, is difficult to predict. One thing is quite clear, the beginning of this work cannot be postponed.

## References

1. Klepikov I (2017) Acute pneumonia in children: the price of illusions and delusions. J Pediatr Care 3(1): 4.
2. Klepikov I (2017) Why need a new concept of acute pneumonia. J Tradit Med Clin Natur 6: 212.
3. https://gehealthcloud.devpost.com/forum_topics/6433-tablet-against-pneumonia-modern-delusion-igor-klepikov-md-professor
4. Klepikov I (2017) The new doctrine of acute pneumonia-the key to solve the problem. Journal of Integrative Pediatric Healthcare.
5. Elemraid MA, Thomas MF, Blain AP, Rushton SP, Spencer DA, et al. (2015) Risk factors for the development of pleural empyema in children. Pediatr Pulmonol 50(7): 721-726.
6. Pabary R, Balfour Lynn IM (2013) Complicated pneumonia in children. Breathe 9: 210-222.
7. http://www.uptodate.com/contents/epidemiology-clinical-presentation-and-evaluation-of-parapneumonic-effusion-and-empyema-in-children
8. http://pediatrics.aappublications.org/content/125/1/26
9. Ampofo K, Pavia AT, Stockmann CR, Blaschke AJ, Cindy Weng HY, et al. (2011) Evolution of the epidemiology of pneumococcal disease among Utah children through the vaccine era. Pediatr Infect Dis J 30(12): 1100-1103.
10. http://www.cdc.gov/media/releases/2015/p0225-pneumonia-hospitalizations.html
11. http://healthcare.utah.edu/publicaffairs/news/2015/02/022515_Childhood_Pneumonia.php
12. Klepikov I (2017) Acute pneumonia in children -illness or infection? Open Letter to the Editorial Staff. J Infect Non Infect Dis 3: 017.


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