RESOLUTION

of online teleconference «New wave of COVID-19: Delta strain is the further danger»

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About 5,000 health system professionals from Uzbekistan, Tajikistan, Kyrgyzstan, Georgia, Kazakhstan, Ukraine, Azerbaijan and other countries have registered to participate in the teleconference «New wave of COVID-19: Delta strain is the further danger».

Within the framework of the event, leading scientists and doctors who have been helping patients with COVID-19 since the first days of the pandemic in the country shared their experience.

The interdisciplinary format of the event was ensured by the involvement of representatives of different specialties in speaking engagement. Namely, infectious disease specialists, pulmonologists, resuscitators, family doctors.

The participants were invited to the attention and discussion of nine reports, in which the following issues were considered:

- Covid-19: Delta strain, what else have to be learned?
- A look at the prevention and treatment of Covid-19 in the context of the dominance of the Delta strain.
- Disruption of carbohydrate metabolism in patients with severe Covid-19: causes and tactical steps.
- Retrombosis in patients with Covid-19.
- Features of infusion therapy for Covid-19.

Conclusions and decisions based on the results of the discussion of the reports:

1. According to the WHO, the Delta variant has been found in 80 countries and it continues to spread rapidly around the world. The delta strain is highly contagious and, unlike other variants, it infects more young people and children. In every third person, it is accompanied by dysfunction from the gastrointestinal tract. Also, the probability of hospitalization of patients with the Delta strain is 2 times higher than that of other options. Therefore, it is necessary to adapt the treatment to the Delta strain.

2. Understanding the undulating course of COVID-19 demonstrates the feasibility of using a syndromic-pathogenetic approach in the treatment of COVID-19 at each stage of the disease. At the stage of mild disease, the use of an inhalation antiseptic (decamethoxin), a local antiviral drug (aminocaproic acid), and systemic antiviral drugs should be considered. In the case of moderately severe disease, it may be advisable to add a triplet of drugs to the treatment scheme Volnorez (edaravone, fixed combination of L-arginine and L-carnitine, hyperosmolar crystalloid solution in compliance with a low-volume infusion therapy regimen).

3. Coronavirus infection can damage the pancreas, provoke post-viral fatigue syndrome and further myalgic encephalomyelitis – it is a pathological condition that manifests itself in the form of chronic fatigue that lasts at least 6 months and leads to cognitive impairment. In combination with adequate, pathogenetically substantiated infusion therapy of asthenic syndrome, an important place is occupied by the use of solutions with a pronounced energetic effect, created on the basis of xylitol.

4. New variants of the virus appear and the clinic of the disease changes accordingly. It is very important to adapt the treatment based on the characteristics of the new strains. In particular, with the Delta strain, the need for parenteral agents is higher due to disorders in the gastrointestinal tract, which interfere with an adequate drinking regime and nutrition. It is recommended to adhere to the conservative tactics of infusion therapy. The use of hypotonic crystalloids, starches, or gelatins is not recommended. The initial infusion therapy should be a 500 ml bolus of crystalloids. For acute resuscitation of adults with COVID-19 and shock, balanced crystalloids are recommended.

5. Background systemic inflammation syndrome and endotheliitis syndrome develop with coronavirus infection. The level of circulating pro-inflammatory cytokines (IL-1, IL-4, IL-6, IL-17) increases and endothelial damage develops, the balance of the blood coagulation and anticoagulation systems is disturbed. As a result, there is a tendency to thrombosis and retrombosis, which are potentially life-threatening conditions. The use of edaravone reduces the concentration of pro-inflammatory cytokines and inhibits the hyperimmune response, and has an endothelioprotective effect. The fixed combination of L-carnitine and L-arginine reduces the manifestations of endotheliitis, improves energy supply to the myocardium and increases exercise tolerance. In combination, such a scheme allows pathogenetically to prevent the development of retrombosis in patients with COVID-19.

6. Currently, there is a proven link between BMI and the risk of death among patients with COVID-19, a high BMI leads to a greater degree of mortality in young people and male patients. In obese patients, hyperactivation of proinflammatory cytokines (IL-6, TNF, etc.) is observed, the risk of pulmonary embolism, arterial thrombosis and venous thromboembolism increases by 2–5 times. The fixed combination of L-carnitine and L-arginine reduces the risk of thrombosis and the development of thromboembolism by reducing the manifestation of endotheliitis, and also has a positive effect on carbohydrate and lipid metabolism, and helps to reduce body weight. Edaravone activates eNOS and inhibits the activity of iNOS and nNOS, enhances the adhesive contacts of the endothelium. The xylitol-based solution normalizes blood pH, improves its rheological properties and is an insulin-independent source of energy for patients.

7. For several weeks now, a new wave of COVID-19 has been gaining momentum, this time it is a new Delta strain. It is generally accepted that the new strain is more contagious, more likely to cause severe disease and more often it causes death. Patients should consult a doctor at the first symptoms of the disease, and, if necessary, be hospitalized for the timely appointment of syndromic-pathogenetic treatment. Along with preventive measures (social distancing, correct use of personal protective equipment, vaccination), it is this approach to therapy that will prevent the growth of a new wave of COVID-19 to a critical level of morbidity and mortality.

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