

**INDICATIONS FOR FIBRINOLYSIS AND DETECTION OF SYSTEMIC
INFLAMMATORY REACTION IN PATIENTS WITH ACETIC ACID POISONING***Quvatov Z.S.**Bukhara State Medical Institute, Bukhara branch of
RNCEMP., Bukhara, Uzbekistan*✓ **Summary.**

The authors investigated the interdependence of fibrinolysis activation and systemic inflammatory response syndrome development in 68 patients with severe level of acute poisoning by azaleptin. A positive correlation was found between blood levels of D-dimer, clinical indications of systemic inflammation and C-reactive protein

Keywords: *acute poisoning, systemic inflammatory reaction syndrome, fibrinolysis, D-dimers.*

Acetic acid (AC) differs from other cauterizing substances not only by the nature of the burn, but also by its active resorptive properties, leading to the development of hemolysis, toxic coagulopathy, multiple intravascular coagulation syndrome and critical condition of the body. Hemolysis of erythrocytes is one of the leading triggers in the development of toxic coagulopathy syndrome. Burn destruction of tissues, disintegration of erythrocytes cause the release of a large amount of thromboplastic material and the beginning of stage I of toxic coagulopathy - the stage of hypercoagulation. Early detection of signs of disseminated intravascular coagulation (DIC), along with an assessment of the development of inflammation, will prevent the development of complications, increase the effectiveness of their prevention and, ultimately, determine the outcome of poisoning.

Purpose of the study. to identify the relationship between the activation of fibrinolysis and the development of the systemic inflammatory response syndrome in patients with acute acetic acid poisoning.

Material and methods. 68 patients (mean age 34.6 ± 4.4 years) with acute acetic acid poisoning were examined. admitted to the intensive care unit of the Bukhara branch of the RNCEMP. The comparison group consisted of 30 healthy volunteers (mean age 30.1 ± 7.9 years). The level of consciousness was determined using the Glasgow scale. The development of the systemic inflammatory response syndrome (SIRS), sepsis was determined by the presence of the signs presented in the recommendations of the International Guidelines for Severe Sepsis and Septic Shock (The Third International Consensus Definitions for Sepsis and Septic Shock - Sepsis-3 (2016)). The coagulographic index of lethal outcome (KILI) was calculated based on the electrocoagulogram indicators of arterial and venous blood on the day of the patient's admission.

Thus, the severity of the condition in the two groups of patients examined by their homogeneity was determined by the depth of the comatose state, which caused the development of mixed hypoxia, disorders in the blood clotting system, the development of systemic inflammation. Both groups had their own clinical features: in group 1, 46% of patients had foci of purulent infection in the lungs (focal, lower lobe pneumonia) without signs of severe sepsis, in group 2 (deceased), in 100% of cases, purulent infection resulted in bilateral drain pneumonia, signs of severe sepsis with the development of systemic inflammation and more pronounced disorders in the blood clotting



system were observed.

The study of the C-reactive protein content in the blood also confirmed a higher level of inflammation activity in deceased patients, while the D-dimer content in the blood plasma of patients significantly correlated with the number of signs of CVD on the 1st and 5th days ($g=0.47$, $p<0.05$ and $g=0.79$, $p<0.05$, $n=27$), the content of SRV in the blood serum ($g=0.51$, $p<0.05$, $n=26$) and the number of SOFA points on the 5th day after poisoning ($g=0.86$, $p<0.05$, $n=26$). As shown earlier, mixed-type hypoxia, which develops in patients with acute acetic acid poisoning, in turn, provokes the development of bacterial infection, both local (group 1) and systemic (group 2). Bacteremia, confirmed by a bacteriological blood test, was observed in 35% of patients with a negative prognosis of the outcome of the disease. The presence of pathogenic microflora in the victims, which includes microflora detected in biological media (*Staphylococcus aureus* (55%), *Pseudomonas aeruginosa* (45%), proteus, coagulase-negative staphylococcus), indicates pronounced violations of humoral immunity, immunity of the mucous membranes. Inflammation caused by induced hypoxia of mixed type in combination with foci of infection, disorders in the blood clotting system, together depending on the depth and severity of the disturbance of consciousness, cause an increase in manifestations of multiple organ failure (dysfunction).

Results. Studies have determined the relationship between the activation of fibrinolysis and the development of a systemic inflammatory response syndrome in 68 patients with severe acute acetic acid poisoning. A positive correlation was found between the content of D-dimer in the blood, clinical signs of systemic inflammation, and the content of C-reactive protein.

Conclusions. In patients with acute acetic acid poisoning, a positive correlation of β -D-dimer in blood plasma with the number of clinical signs of SIRS and the level of C-reactive protein was revealed. In the group of deceased patients, the content of D-dimer and C-reactive protein remained significantly higher and signs of organ dysfunction increased.