# The condition of the fluid compartments by the method of bioimpedancemetry in victims with a blast injury

**O.V. Kravets[1], O.M. Klygunenko[1], V.V. Yekhalov[1], D.M. Stanin[1], A.A. Lopata[2]**
1. Dnipro State Medical University, Dnipro, Ukraine
2. Communal Non-profit Enterprise "City Maternity Hospital No. 1" of the Dnipro City Council, Dnipro, Ukraine
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**BACKGROUND.** According to the modern standards, in case of an acute blood loss, the pathogenetic provision of fluid therapy is based on the ROSE/D concept. According to this concept, after the initial emergency restoration of circulating blood volume, the fluid compartments should be optimized with further stabilization of the condition.
**OBJECTIVE.** To study the fluid compartments in mine-explosive injuries victims.
**MATERIALS AND METHODS.** 28 servicemen aged 20 to 51 years (average age 34.6±10.3 years) who were in the intensive care unit (ICU) with mine-explosive injuries of various localization (chest, abdomen, limbs) were examined. The victims were given fluid therapy in a restrictive mode. The condition of fluid compartments was determined by the method of bioimpedance measurement and calculation methods.
**RESULTS.** On the first day of ICU stay, the total amount of water in the body exceeded the norm by 3 %. At the same time, the volume of intracellular water was significantly lower than normal by 22 %. On the second day, the total amount of water in the body normalized, but the indicator of intracellular water increased by 9.5 % of the reference.
**CONCLUSIONS.** It is shown that despite the restoration of the circulating blood volume, there is an intracellular fluid deficit, which, even in the conditions of the restrictive fluid therapy, is replaced by a slight compensatory intracellular hyperhydration the next day when the intravascular volume of fluid is normalized.

**KEY WORDS:** blood loss, blast injury, bioimpedancemetry, water sectors.

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