

## **1 Abstract**

The evaluation of anthropometric parameters is one of an assessment of nutritional status of hospitalized patients. The correct designation of this condition is necessary to determine the patient's prognosis and further treatment to prevent or capture the first signs of developing malnutrition. This negatively affects the patient's condition and cause the development of other complications and prolonged treatment.

In this study, anthropometric data collection were examined in polytraumatic patients. Examinations were conducted over a period of 8 months on Unit of the intensive care. The examination shall be subjected to a total of 20 patients with polytrauma different aged 15-64 years, 15 men and 5 women. The results were listed and evaluated examinations at 12 patients, the remaining patients could not be observed in the results of the work for missing data. Patients were examined twice during hospitalization, the basic length of the interval between inspections was 2 weeks. The results were statistically processed and evaluated the changes in some anthropometric parameters between the two measurement periods.

Attention has been focused on prognostic indicators of nutritional status - the value of weight, BMI, left arm circumference, thickness of triceps skinfolds, FM (fat mass), FFM (fat-free mass), and MAMC (mid-arm muscle circumference). In addition to the FFM occurred in all other parameters in these two examinations to decrease their average value. Due to the collection of fluid in the hypercatabolic phase and its accumulation under the skin to the calibration of the methods proved inadequate to assess the number of FM and FFM. The correlation analysis was made between the various prognostic factors, nutritional status and other anthropometric data. Most of the correlations we found between the values of weight, BMI, BSA, suprascapular and subscapular skinfolds, and in relation to the values of weight, BMI, FM, FFM, and MAMC.