OZ-P-073: OZONE APPLICATION INTHE TREATMENT OF MALIGNANT NEOPLASIAS IN DOGS. T.Scherbatyuk, G.Poslov and V.Illarionov. Medical Academy, Nizhni Novgorod, Russia.

Dogs with malignant neoplasias were used in this study. Ozone therapy was applied by intravenous infusion of ozonized physiological saline solution (100 - 200 mL, ozone concentration in the gas mixture 800 mcg/L) and by local application: intratumoral and peritumoral injection of ozonized physiological saline solution. A cycle of treatment lasted from 5 to 15 days. The results indicated that, ozone therapy on animals with malignant neoplasias, affected tumor metabolism and stopped its pathologic action on organism, confirmed by the normalization of blood biochemical indices in treated tumor animals. Free-radical attack caused by local action of ozone led to the intensification of tumor cell respiration, on one hand, and to the suppression of the neoplasia antioxidant defence system, on the other hand. Cell death of certain part of tumor popullation occured finally, which led to the decrease in the blastoma sizes and the necrotic processes development. Surgical procedure, in this case, is necessary in order to clean the damage tissue of the necrotic tumour mass.