Therapeutic effect of ozone gas on bovine mastitis.

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Abstract

The potential therapeutic effect of ozone gas on bovine mastitis was investigated. 18 quarters from 18 lactating cows with chronic mastitis were included this study. The 18 quarters were assigned either to the control group (treatment with antibiotics for 3 days), experimental group I (0.1 ppm ozone treatment for 7 days) or experimental group II (one ppm ozone treatment for 3 days). In experimental group I, the milk somatic cell counts were lower on day 7 after ozone treatment compared to the pretreatment counts, but were higher than the control counts. In experimental group II, somatic cell counts were significantly decreased ($p<0.05$) on day 7 compared to the pretreatment counts and were lower than the control counts. No changes in leukocyte, neutrophil and lymphocyte numbers, N/L ratios and serum total protein were observed in the control and experimental groups. It was concluded that ozone gas treatment (one ppm for 3 days) might be effective for the treatment of bovine mastitis.