

A Therapeutic Effect of Ozonated Oil on Bovine Mastitis

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Abstract

This study was conducted to determine if ozonated oil had a therapeutic effect on bovine mastitis. 49 quarters from 24 lactating cows with chronic mastitis were selected for this study. The cows were raised on dairy farms in Gongju, Jochiwon and Yeongi in Chungnam province, and Iksan in Jeonbuk province, Korea Republic. The 49 quarters affected with bovine mastitis were divided into control (7 quarters) and experimental (42 quarters) groups. The experimental quarters were assigned to experimental groups A (10 quarters, somatic cell count: 50-100x10⁴/ml), B (14 quarters, somatic cells count: 100-300x10⁴/ml) and C (18 quarters, somatic cells count: >300x10⁴/ml), respectively, according to the number of the somatic cells in their milk. The quarters of control group were treated with norfloxacin ointment (10 g/tube) based on the result of sensitivity twice a day for 3 days. The quarters of experimental groups were infused with 10 ml of ozonated oils twice a day for 3 days. After treatment, the milk of the control group contained insignificantly lower numbers of somatic cells and bacteria on day 7 compared to pretreatment levels. Experimental groups A, B and C had lower somatic and bacterial cells in their milk on day 7 compared to pretreatment levels. Experimental groups B and C had significantly lower numbers of somatic cells in their milk on day 7 than before treatment ($p < 0.01$). However, an insignificant difference in somatic cell numbers was detected between the control and experimental groups. It was concluded that ozone therapy with ozonated oil applied on bovine mastitis might be effective.