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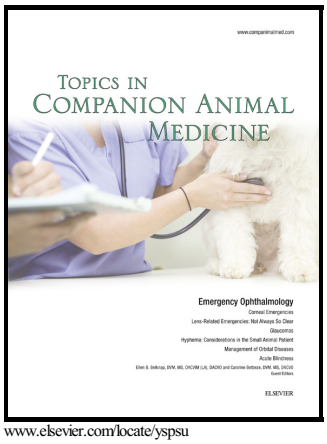

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Heat shock proteins 70kDa, eosinophil cationic protein and nitric oxide during chronic superficial keratitis in dogs

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Abstract

The objective of the study was to determine the levels of eosinophil cationic protein, heat shock proteins 70, and nitric oxide ions (NO) measured as nitrite ions (Griess reaction) in dogs with chronic superficial keratitis.

The study was conducted on 24 dogs with chronic superficial keratitis. Blood sera from the animals were tested for concentrations of heat shock proteins 70, eosinophil cationic protein, and nitrite ions prior to treatment and again 5 weeks and 6 months after treatment. Dogs with chronic superficial keratitis were treated for 6 months with various regimes involving the use of ophthalmic drops containing dexamethasone, dimethyl sulfoxide, and cyclosporine. The control group consisted of 16 clinically healthy German shepherds.

The results obtained indicated a significant ($P \leq 0.05$) elevation in the concentrations of heat shock proteins 70 and nitrite ions in dogs with chronic superficial keratitis in comparison to healthy dogs and dogs after 5 weeks of therapy. After 6 months of treatment, concentrations of heat shock proteins 70, eosinophil cationic protein and nitrite ions had fallen below pre-