

THE APPRECIATION OF ANTIBACTERIAL ACTIVITY OF ENROFLOXACIN AND CEFTIOFUR BY DETERMINING THE FIBRINOGEN AMOUNT FOR THE CLINICAL TESTING IN SHEEP

Mărculescu Anca, Gh. Răpunțean, R. Chereji, N.A. Oros, M. Cernea

Universitatea de Științe Agricole și Medicină Veterinară, Str. Mănăștur nr. 3-5, Cluj-Napoca

Keywords: fibrinogen; salmonellosis; sheep

SUMMARY

Many times; the combination of antibiotics is proved to be a better alternative in therapy; especially when the associated antibiotics are synergic. In this study; two bactericidal antibiotics – enrofloxacin and ceftiofur – were clinically tested in young sheep diagnosed with salmonellosis; by interpreting the value of fibrinogen; an acute phase reactant; before the therapy; and also in day 1;3; and 7 of treatment; in the groups treated both with a combination of antibiotics and also with an antibiotic alone.

The values of the fibrinogen were two times higher; at the beginning of the therapy; in diseased sheep than the values of the control group; after a day of treatment; the fibrinogen increased in ENR group; meanwhile in ENR+EFT group started to decrease; in the day 3 of therapy; the fibrinogen increased more in ENR group; but for ENR+EFT group it was registered the grew less and less in comparison with day 1; the day 7 present the fibrinogen in ENR group in a pronounced decreasing than the day 3 ; the high value of the fibrinogen in ENR group in comparison with the decreasing of the fibrinogen values in ENR+EFT group determined a statistically distinct significant difference between the treated groups.

Analyzing these data; it can be considered that enrofloxacin combined with ceftiofur was more efficient; starting with day 3; in comparison with enrofloxacin; that had better results after 7 days of treatment.

BIBLIOGRAPHY

1. CAMPBELL A.; M. OLDHAM; A. BECARIA; S.C. BONDY; D. MEACHER; C. SIOUTAS; C. MISRA; L.B. MENDEZ; M. KLEINMAN; 2005; Particulate matter in pollutes air may increase biomarkers of inflammation in mouse brain; *Neurotoxicology*; 26 (1): 133-40;
2. DEVERAJ S; G. O'KEEFE; I. JIALAI; 2005; Defining the proinflammatory phenotype using high sensitive C-reactive protein levels as the biomarker; *J Clin Endocrinol Metab*; 90 (8): 4549-54;
3. RICHARD M.; M.D. FOGOROS; 2003; C-reactive protein and fibrinogen; *Heart Disease*; 3370;
4. GRUYS E.; M.J.M. TOUSSAINT; T.A. NIEWOLD; S.J. KOOPMANS; 2005; Acute phase reaction and acute phase proteins; *J. Zhejiang Univ. Sci. B.*; 6/11: 1045-1056;
5. LARSSON E.; E.H. HARRIS; J.C. LORENTZEN; A. LARSSON; B. MANSSON; L. KLARESKOG; T. SAXNE; 2002; Serum concentrations of cartilage oligomeric matrix protein; fibrinogen and hyaluronan distinguish inflammation and cartilage destruction in experimental arthritis in rats; *Rheumatology* 41: 996-1000;
6. MANTEI U.; C.S. ROBERT; PATRICIA C. GICISA; 1984; Acute local inflammation alters synthesis; distribution and catabolism of the third component of complement (C3) in rabbits; *J.Clin.Invest.*;74: 424-433;

7. ROMETTE J.; J. DI CONSTANZO-DUFETEL; M. CHARREL; 1986; Inflammatory syndrome and changes in plasma proteins; *Pathol. Biol. (Paris)* 34 (9): 1006-12;