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Effects of Corynebacterium cutis Lysate Administration on Hematology and Biochemistry Parameters with PPR Vaccine

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Abstract : The objective of this study was to evaluate the effects of alone and combined administration of Peste des petits ruminants (PPR) vaccine with Corynebacterium cutis lysate (CCL) on the hematology and biochemistry parameters levels in sheep. CCL and PPR vaccine changes cell and organ activity. In this study, 12 ewes were divided into equal groups; first group; PPR vaccine was applied only one time 1 mL subcutan of armpit on 6 sheep, and the second group; CCL (1 mL) and PPR vaccine (1 mL) combination were applied only one time subcutan of armpit on 6 sheep. Blood samples were collected before treatment (0. hour, control) and after treatment (1, 3, 7, 14, 21 and 28 days) from the sheep. Plasma and serum samples were evaluated for hematology and biochemistry parameters and there were statistically significant in sheep. In conclusion, combined usage of PPR vaccine with CCL may not influence cells and organs. Repeated CCL treatment with vaccine can create hepatotoxic, renal and bone marrow effects in sheep.

Keywords: Corynebacterium cutis lysate, hematology, peste des petits ruminants, vaccine

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