

LPC 疫苗對 PCV2 感染豬隻之影響

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摘要

豬第二型環狀病毒 (Porcine circovirus type 2 ; PCV2) 主要感染 25 至 120 日齡之豬隻且容易引發離乳後多系統性消耗症候群 (Postweaning multisystemic wasting syndrome ; PMWS)，並導致嚴重的免疫抑制，然而，PCV2 感染豬隻在演變為 PMWS 的過程中，需要許多環境因子的刺激，目前已知包括：*Mycoplasma hyopneumoniae*、porcine reproductive and respiratory syndrome virus、porcine parvovirus、疫苗免疫與免疫調節劑均可誘發 PCV2 感染豬隻轉變為 PMWS。另外，兔化豬瘟疫苗是國內防範豬瘟的重要利器，其免疫適期為 3 與 6 週齡或 6 與 9 週齡，因此，本試驗將評估田間經常使用的 LPC 疫苗對 PCV2 感染豬隻的影響。而從實驗結果得知，LPC 疫苗會誘發 PCV2 感染豬隻產生下痢，進而減緩豬隻增重，但對於 PCV2 感染豬隻的血液學、PCV2 病毒量與 PCV2 抗體生成並無顯著性之影響。

The effect of LPC vaccination in the PCV2-infected pigs

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Abstract

Porcine circovirus type 2 (PCV2) is infectious to post-weaning pigs with the ages of 25 to 120 days and related to postweaning multisystemic wasting syndrome (PMWS) that revealed severe immunosuppression. Most PMWS cases are associated with PCV2 infection, but PCV2 infection does not always cause PMWS. It has been known that PMWS is correlated with the enhancement of other factors in PCV2 infected pigs. Until now, *Mycoplasma hyopneumoniae*, porcine parvovirus (PPV), porcine reproductive and respiratory syndrome virus (PRRSV), vaccination or chemical of immune-suppression and immune-immunodulation has been reported to be able to enhance development of PMWS from PCV2-infected pigs. In addition, LPC vaccine is used to prevent classical swine fever in Taiwan and vaccination programs is at 3- and 6-week of age or 6- and 9-week of age. The PCV2-susceptible age of pigs is known to overlap with vaccination programs of the LPC vaccines. In the present study, the effect of LPC vaccination in the PCV2-infected pigs was evaluated by *in vivo* experiment. We found that LPC vaccination could enhance the diarrhea in the PCV2-infected pigs and led to decrease in feed conversion rate. The characteristic of WBC, PCV2 viral load and PCV2 antibody in PCV2-infected pigs was not affected by LPC vaccination.