Proliferative and Necrotizing Pneumonia in Postweaning and Nursing Pigs in Taiwan

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ABSTRACT Two hundred and seventy-five pneumonic cases collected between 1992 and 1993 from 33 pig farms in Taiwan were included in this study. The main clinical signs of these postweaning and nursing pigs included tachypnoea, dyspnea and abdominal respiration. Fifty cases (18%) of proliferative and necrotizing pneumonia (PNP) were diagnosed histopathologically and the lesions were featuring with thickening of alveolar septa by infiltration of macrophages/or mononuclear cells and accumulation of numerous desquamous cells, necrotic debris and inflammatory cells in the alveolar spaces. The etiology of PNP was the combined infection of bacterial and viral pathogens decided by polymerase chain reaction (PCR) and bacterial isolation. The detection rate in PNP lesion showed that porcine circovirus type 2 (PCV2) was 100%, porcine reproductive and respiratory syndrome virus (PRRSV) was 12%, Salmonella spp. was 26%, Mycoplasma spp. was 22%, Pasteurella spp. was 4% and E coli was 4%. In addition, using in situ hybridization (in situ) or immunohistochemistry (IHC) to detect viral pathogens in the PNP lesions, the results revealed PCV2 was 88% (44/50), PRRSV was 28% (14/50), swine influenza virus (SIV) was 38% (19/50), and porcine parvovirus (PPV) was 84% (42/50). The results of the present study demonstrated that viral and bacterial agents were consistently and predominantly associated with PNP in Taiwan. [Chiou MT, Lee YT, Pang VF, Hsiao SH, Chen CM, Tsai CP, * Jeng CR. Proliferative and Necrotizing Pneumonia in Postweaning and Nursing Pigs in Taiwan. Taiwan Vet J 36 (3): 201-206, 2010. * Corresponding author TEL: 886-2-2362, ext: 1965, FAX: 886-2-2366, ext: 1475, E-mail: crjeng@ntu.edu.tw]

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