

Management induced PCV2 and PMWS induced PCV2

John Carr

Murdoch University and Portec Australia

Post-weaning Multisystemic Wasting Syndrome continues to ravage the pig industry. The cause of the syndrome continues to be problematic. This paper highlights the differences between management induced PCV2 problems and PMWS induced PCV2.

PCV2 lesions can be caused by management failings, including severe outbreaks of disease acting on the native PCV2 virus already present on a farm.

PMWS is a specific syndrome caused by an as yet unknown agent which can induce the native PCV2 virus to create the characteristic histological lesions. There are clear clinical differences between these two syndromes.

Observation

Epidemiology

Occurrence
Spread lateral between unrelated farms
Spread by Pigs – AI/genetics
Closed isolated farms can remain clinically negative
Clinical signs in the next group of pigs to be weaned when they are moved to another clean farm
Clinical signs in introduced naive weaned (8 kg) pigs from PMWS negative source

Clinical signs

Sudden appearance on a farm or area
Age group
Morbidity
Mortality
Each progressive group becomes sick
Affects multiple groups at the same time
Clinically normal pigs and sick pigs in same group
Clinically normal pigs rapidly – within 7 days – lose enormous body condition and continue to eat
Recovered pigs market reasonably normally
Clinical signs of PDNS evident in group in early stages of acute onset of mortality
Affect on adults – in particular reproductive problems
Persistence of clinical signs

Treatment and control

Control with PCV2 vaccines
Resolution with antibiotics
Resolution with simple management
Control with advanced management
Effect of depopulation

Pathology

Histological changes described re PCV2
Presence of PCV2
Massive presence of PCV2

Management induced PCV2	PMWS induced PCV2
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Globally in all pig industries	Progressively spread around the world. Australia free
No	Yes
No	Yes
No - Only isolated islands	Yes
No	Moved pigs get sick
Clinical signs develop	No

Variable	Yes
Variable weaning to slaughter	15-70 kg
Variable – low numbers – depends on co-pathogens	40-60%
Variable. generally <10% - depends on co-pathogens	25-90% Worse with co-pathogens
No	Yes
Variable	Yes
No-variable	Yes
No	Yes
No	Yes
No – rare	Yes common
Suspected	No
No	Yes (36 months +)

Yes	Yes
Yes	No
Yes	No
Yes	Yes - difficult
No PCV2 remains after depopulation.	Yes following introduction of negative PMWS stock

Yes	Yes
Yes	Yes
Yes/variable	Yes