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Case Reports

PITYRIASIS ROSEA IN WEANER PIGS

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SUMMARY

This report describes a case of pityriasis rosea in three 8-week-old weaners on a commercial pig farm in Tanjung Sepat, Selangor. The pigs presented with generalised brownish-black, irregular, crusty, mosaic-like skin lesions with raised scabs affecting most of the body, sparing the mouth. Complete blood count, serum biochemistry, and tape impression tests were performed to rule out differential diagnoses. Based on clinical findings and exclusion of other skin diseases, pityriasis rosea was diagnosed. As the disease is self-limiting, treatment focuses on preventing secondary bacterial infections. All three pigs were treated with ceftiofur, flunixin meglumine, and topical povidone iodine. The calculated detection rate was 3.06% among 98 pigs in the isolation unit. This report emphasises the importance of distinguishing pityriasis rosea from other porcine dermatopathies and highlights its generally benign course with minimal economic implications.

Keywords: pigs, pityriasis rosea, skin disease, weaners, secondary bacterial infection

Introduction

Pityriasis rosea, also known as porcine juvenile pustular psoriasis dermatitis, is an uncommon, self-limiting dermatopathy of pigs, most frequently affecting animals between 8 and 14 weeks of age, though cases have been reported as early as 2 weeks and as late as 10 months (Davies, 2024). Lesions typically begin as small erythematous papules, which enlarge into circular plaques with raised erythematous borders and flat, scaly centres. Adjacent lesions may coalesce, forming larger irregular patterns (Doster, 1995). Unlike several other porcine dermatoses, pityriasis rosea is not pruritic (Zimmerman, 2019). Lesions are most commonly observed on the ventral abdomen and inner thighs but may also appear on the dorsum, neck, and limbs (Davies, 2024). Spontaneous recovery usually occurs within 6–8 weeks, and treatment is generally unnecessary (Zimmerman, 2019).

Case Report

The study was conducted on a commercial farrow-to-finish pig farm in Tanjung Sepat, Selangor, managed under an open-house, intensive system with approximately 800 sows. The isolation unit housed 98 pigs of various ages. Three male, commercial crossbred weaners (8 weeks old; 8–10 kg; body condition score 3/5) presented with dermatological lesions. The three wearners were referred to as Piggy 1, Piggy 2, and Piggy 3.

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Clinical examination

In all three pigs, mucous membranes were pink, capillary refill time was <2 seconds, skin tenting <2 seconds, and lung auscultation was normal. The most notable findings were generalized, brownish-black, irregularly shaped, crusty, mosaic-like skin lesions with raised scabs covering most of the body, except the mouth (Figure 1).

Piggy 1 was tachycardic (124 bpm), tachypneic (64 bpm) and hyperthermic (40.5°C). Piggy 2 was tachycardic (156 bpm), tachypneic (76 bpm) and hyperthermic (40.1°C). Piggy 3 was tachycardic (132 bpm), tachypneic (68 bpm) and hyperthermic (40.0°C).

Figure 1: Generalised, brownish-black, irregularly shaped, crusty, mosaic-like skin lesions with raised scabs covering most of the body, except the mouth region.

Differential diagnoses and diagnostic tests

The differential diagnoses were listed based on the characteristics of the lesions, skin samples microscopic examination, farm history, breed and age of the animal as

well as findings from the physical examination (PE). Differentials considered included as follows ; (a) Pityriasis Rosea, (b) Swine pox, (c) Erysipelas and (d) Exudative epidermitis (greasy pig disease).

For diagnostic purposes, blood samples were collected and stored in a plain tube to perform a haemogram and in an ethylenediaminetetraacetic acid (EDTA) tube for serum biochemistry. The test was performed only on Piggy 1, and the results are shown in Table 1.

For diagnostic purposes, skin samples were taken. Transparent acetate tape was applied to the skin lesions, then placed on a microscope slide and stained with Diff-Quik. The findings as shown in Figure 2.

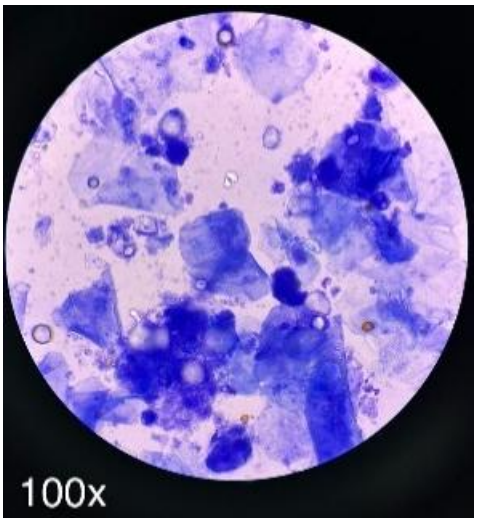

Figure 2. Tape impression test showed keratinocytes and artefacts, with no presence of *Staphylococcus hyicus* (Greasy pig disease)

Swine pox was excluded based on the absence of leucocytosis (as shown in the blood results II, a) and the lack of spread to pen mates. Erysipelas was ruled out due to the absence of characteristic diamond-shaped lesions and systemic signs of septicaemia. Greasy pig disease was excluded following tape impression, which showed only keratinocytes and artefacts (III, Figure 2), with no characteristic lesions around the mouth. Based on clinical presentation and exclusion of other causes, a definitive diagnosis of pityriasis rosea was made.

Treatment

Although treatment is generally unnecessary, supportive therapy was provided to prevent secondary bacterial infection:

- Ceftiofur (100 mg/ml; 5 mg/kg; 0.5 ml IM; SID for 3 days)
- Flunixin meglumine (50 mg/ml; 2.2 mg/kg; 0.44 ml IM; SID for 3 days)
- Topical povidone iodine applied to skin lesions

Detection rate

The detection rate within the isolation unit was 3.06% (n = 98). All sick pigs with clinical signs, including skin and other disorders, were placed in the isolation unit by the farmers. Therefore, this rate reflects the occurrence in the isolation unit only and cannot be generalised to the entire farm. Other pigs in the same pen did not show any skin disorders, and hence the condition was not transmissible or contagious.

Table 1. The complete blood count and serum biochemistry of Piggy 1

Haemogram	**Result**	**Reference Range**	**Findings**
Erythrocytes (RBC) x10^12/L	6.41	5.00 – 8.00	Hypochromic anemia due to iron deficiency
Hb g/L	86	100 – 160	
PCV L/L	0.29	0.32 – 0.50	
MCV fL	45	44 – 68	
MCHC g/L	297	300 - 360	
Leukocytes (WBC) X10^9/L	21.16	11.0 – 24.0	-
Band Neutrophils X10^9/L	0.62	<10	-
Seg. Neutrophils X10^9/L	10.38	3.08 – 10.34	Mildly elevated may be due to stress
Lymphocytes X10^9/L	7.68	3.6 – 18.5	-
Monocytes X10^9/L	1.25	<4.9	-
Eosinophils X10^9/L	0.62	<2.5	-
Basophils X10^9/L	0.21	<0.7	-
Thrombocytes X10^9/L	240	120 - 720	-
Icterus Index Unit	Lysed		-

Serum Biochemistry	**Result**	**Reference Range**	**Findings**
Urea mmol/L	6.8	3.6 - 10.7	-
Creatinine µmol/L	90	141 – 239	Low due to low muscle mass in young pig (weaner)
ALT U/L	66.3	31 -58	Mildly elevated due to liver injury
AP (ALP) U/L	68.4	118 – 395	Low due to undernutrition

AST	155.9	32 - 272	-

Discussion

Skin diseases in pigs may be primary conditions or manifestations of systemic illness (Pereira et al., 2020). Infectious etiologies include bacteria (e.g., *Staphylococcus hyicus* in greasy pig disease, *Erysipelothrix rhusiopathiae* in erysipelas), viruses (swine pox, PDNS), fungi (*Microsporum* spp., *Trichophyton* spp.), and parasites (*Sarcoptes scabiei*, *Haematopinus suis*). Non-infectious causes include environmental (sunburn, frostbite), nutritional (parakeratosis), congenital, and neoplastic disorders. (Zimmerman, 2019).

Pityriasis rosea is a congenital/hereditary disorder with a higher incidence reported in Landrace pigs, suggesting a genetic predisposition (Pereira et al., 2020). Unlike its human counterpart, porcine pityriasis rosea lacks etiological or pathological features and is not zoonotic (Kurc et al., 2024).

This farm had a history of pityriasis rosea in the past few years. Hence, it was the top differential diagnosis. Other differential diagnoses were ruled out by diagnostic workup, including a complete blood count (CBC), serum biochemistry, and a tape impression test.

Secondary bacterial infections, particularly *Staphylococcus hyicus*, are common complications in pigs infected with pityriasis rosea and are exacerbated by predisposing factors such as poor hygiene, high stocking density, and high temperature and humidity (Zimmerman, 2019). In the present case, antimicrobial and antiseptic interventions were implemented as precautionary measures against such complications. In this case, ceftiofur, a broad-spectrum antibiotic, was prescribed to prevent secondary skin bacterial infection. Other broad-spectrum antibiotics may also be used. According to Sekyere (2014), chlortetracycline is the drug of choice for skin infections and wounds to prevent secondary bacterial infections. Withdrawal periods of the antimicrobials must be taken note of when prescribing the antimicrobials.

The calculated detection rate of 3.06% aligns with the previously reported low prevalence of pityriasis rosea. A retrospective study by Pereira et al. (2020) recorded pityriasis rosea in only 5.8% of 154 porcine skin disease cases (n = 154). The condition is of minor economic importance due to its self-limiting nature and lack of significant effects on growth rate or productivity in the absence of secondary infections.

Since this condition is congenital, measures should be implemented to prevent its recurrence and spread within the herd. Specifically, sires that produce affected offspring should be excluded from the breeding program. Similarly, Landrace sows associated with affected litters should be removed from the breeding line. To minimise the risk of future occurrences of pityriasis rosea, both the affected pigs and their dams should not be used for breeding purposes.

Conclusion

Pityriasis rosea is a benign, self-limiting skin disease of pigs, most commonly observed in weaners aged 8–14 weeks. Although treatment is not required, supportive therapy may be indicated to prevent secondary bacterial infections. This report highlights the importance of distinguishing pityriasis rosea from other porcine dermatopathies. Good husbandry practices, including maintaining hygiene, reducing stocking density, and controlling environmental factors, are essential in preventing complications.

Conflict of Interest

None of the authors has any financial or personal relationships that could inappropriately influence or bias the work.

Ethical Statement

The animals involved in this report were handled according to institutional and national guidelines for animal welfare.

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References

Davies, P. R. (September 2024). *Pityriasis rosea in pigs (Porcine juvenile pustular psoriaform dermatitis)*. MSD Veterinary Manual. https://www.msdvetmanual.com/integumentary-system/pityriasis-rosea-in-pigs-porcine-juvenile-pustular-psoriaform-dermatitis/pityriasis-rosea-in-pigs

Doster, A. R. (1995). *Skin diseases of swine*. Swine Health and Production, 3(6), 256–261.

Kurc, M. A., Erfan, G., Kaya, A. D., Gülen, D., Oznur, M., & Yanik, M. E. (2024). Association between Pityriasis Rosea (PR) and HHV-6/HHV-7 Infection: Importance of Sample Selection and Diagnostic Techniques. *Diagnostics (Basel, Switzerland)*, *14*(8), 843. https://doi.org/10.3390/diagnostics14080843

Pereira, P. R., Bianchi, R. M., Hammerschmitt, M. E., Cruz, R. A., Hesse, K. L., Sonne, L., Pavarini, S.P., & Driemeier, D. (2020). Primary skin diseases and cutaneous manifestations of systemic diseases in swine. Pesquisa Veterinária Brasileira, 40, 579-588.

Sekyere, J.O. (2014). Antibiotic types and handling practices in disease management among pig farms in ashanti region, ghana. Journal of Veterinary Medicine, 2014, 1-8.

Zimmerman, J. J., Karriker, L. A., Ramirez, A., Schwartz, K. J., Stevenson, G. W., & Zhang, J. (2019). *Diseases of swine* (11th ed.). Wiley-Blackwell.