NADIS disease bulletins are written specifically for farmers, to increase awareness of prevalent conditions and promote disease prevention and control, in order to benefit animal health and welfare.
Farmers are advised to discuss their individual farm circumstances with their veterinary surgeon.

Piglet Tail Necrosis

Necrosis of the tail of the young piglet is seen as an occasional problem in the pig herd and has no particularly significant adverse effects on the pig. As well as being an aesthetic issue, it is most significant when affecting pigs being sold under conditions requiring an undocked tail, e.g. "green" contracts, for weaners/growers and, in some cases, breeding stock. Occasionally the lesions can trigger further damage from tail biting.

Description

Necrosis (tissue death) of the tail occurs within the first week of life. It may appear as a constrictive ring of dead tissue at any point along the tail, cutting off the blood supply to the distal part of the tail, leaving a brown, hard, shrivelled and brittle residue that will snap off easily. Alternatively, the tissue death can appear to start at the tip of the tail – either its natural tip or more commonly the tip left following amputation – and gradually progress up the tail with the same result (Figure 1).

Development

In most cases, the condition is associated with infection into the skin of the tail by bacteria – most commonly Staph hyicus – the usual cause of Greasy Pig Disease. As this organism penetrates into the skin, it causes inflammation that may block the blood supply to the extremities and without a blood supply tissue will die. The underlying cause of tail necrosis is, therefore, damage to the tail and contamination. The primary damage may be the result of:-

1) Abrasion on rough floors as the pigs scrabble to find a teat. In this case, the abrasion may occur at the tail head (Figure 2) or alternatively on the underside of the tail 2-4cm from the base.
2) Fight wounds – the earliest cases of tail biting! The needle sharp teeth of the new born pig can act as an injecting needle, puncturing the skin and introducing bacteria either from the biting piglet's mouth or from the skin surface of the body.
3) Tail docking where clippers are contaminated, or where no effort to cauterise or disinfect the wound is made, bacterial infection gains entry to the cut tissues and progresses up the tail (Figure 1).

Treatment

Where there is evidence that necrosis has started, the tail should be amputated above the margin of necrosis. By law, this can only be done, without anaesthesia, up to 7 days of age. The cut surface should be cauterised with heat or disinfected using strong iodine.

Prevention

Prevention of tail necrosis depends upon identifying and rectifying the underlying insult that allows infection to gain entry.

a) Screeding of floors with a smooth finish (avoiding excessive slipperyness) is essential. If not, then liberal use of bedding (shavings, chopped straw, paper) will act as a buffer between the pig and the concrete.

b) Early clipping of teeth using sharp clippers, individually clipping the 8 needle teeth without shattering. This should be done within 24 hours of birth.

c) Fostering, evening up of litters and provision of milk substitute should reduce the aggression at feeding time and minimise damage between pigs (not just their tails!).

d) Avoid leaving residues of strong disinfectants on floors, which will scald the skin of the newborn pigs (rinse off and dry before re-stocking). Likewise, if lime washing is used, ensure that the lime has fully cured (3-4 days) before stocking. (Uncured lime will also damage the sows' udder).

e) Ensure tail docking equipment is kept clean. Clippers should be dedicated to the tails (use different ones for teeth) boiled after use and dipped in surgical spirit between piglets. Surgical spirit should be kept clean and regularly renewed. Dip the cut tail in iodine dressing immediately after docking.

   Alternatively, dock tails with a thermocautery tool, either gas or electrically powered and ensure it operates at the correct temperature. If not hot enough, it will not cauterise, if too hot it will cause excessive tissue damage.

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