Evaluation of a Protective Material to Prevent Abrasions and Infections of Joints in Baby Pigs

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Streptococcal and staphylococcal infections increase with increases in central farrowing housing and cause serious losses in young pigs. The baby pig may be affected in many ways, such as growths on the heart valves, pneumonia, and peritonitis; however, infected joints are the most serious problem in many herds. The pigs develop enlarged, crippling joints. Many die and others are stunted. Tentative diagnoses often are erysipelas; however, culture of the joints usually reveals that a strept and/or a staph is involved.

The classical explanation is that the organism entered through the untreated umbilical cord, which is sometimes true, but many examined pigs show no evidence of a navel infection. Abrasions of knees are common, especially among pigs from units with concrete slats in the farrowing house. That entrance route is considered primary in developing joint infections.

Prevention and control: It is necessary to determine the cause of a condition before starting a control program. Culture of material from an infected joint is a satisfactory method. Vaccinating sows with a bacterin during gestation may help. Improved sanitation in farrowing units, including treating navels and cutting needle teeth, also is necessary. Applying a protective material to the pigs to prevent injuries on knees also may be a good investment.

Two commercially available protective materials have been studied: Taber Trim Cement and Knee-Kote.* TTC applied to the knees, cannon bone, and fetlock of the front legs remained on the leg up to a week, depending on floor roughness. Exceptionally rough floors required a second application after 5-7 days. TTC's formula has been changed, and it is now marketed as Knee-Kote.*

We have not done controlled studies using incidence of infected joints and effects on gain as parameters; however, the compounds were effective in trials in our ambulatory clinic. Biopsies of skin and subcutaneous tissue have not revealed cellular changes or adverse reactions to the Knee-Kote.

Discussion: The use of a protective material such as Knee-Kote has been shown to reduce the incidence of strept and staph infection in young pigs. This procedure, along with improved management practices, may enable producers to wean larger, healthier litters.

*Taber's Products, Henrietta, Mo.