

Effect of Tail Docking on Health and Performance on Feedlot Calves Housed in Confined Slotted Floor Facilities

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Introduction

Tail docking of cattle is a management procedure used in many confined slotted floor feedlot operations, particularly in the upper Midwest. The practice is instituted to reduce injury due to tails being stepped on and/or caught in between the slats on slotted floors. This, in turn, is thought to prevent subsequent tail infection, ascending myelitis, septicemia, and lameness caused from these injuries. Although this procedure is performed with the intent to improve animal health and welfare by avoiding injuries, little research has been done to determine whether the practice is neutral, advantageous, or detrimental to the animal and/or production. The purpose of this study was to compare the performance and health of calves that have had their tails docked as part of normal management practices used in midwestern confined slotted barn feedlots when compared to calves without docked tails.

Materials and Methods

A total of 140 Angus-based yearling calves averaging 770 lb (350 kg) were blocked by weight and randomly assigned to one of 20 slotted floor pens, with each pen containing seven calves at a density of 6.5 m²/head. Pens were randomly assigned to contain calves with docked tails (n=10) or non-docked tails (n=10). Tail docking was performed following regional anesthesia by a caudal epidural. A 20 cm area of the tail was surgically prepped, and the distal two-thirds was removed at an inter-coccygeal space. An elastrator band was applied to the end of the tail for homeostasis purposes and the wound covered with insecticidal wound spray. Post-surgically, calves received flunixin meglumine (500 mg/mL) intravenously

at a rate of 0.5 mg/lb (1.1 mg/kg). Calves in the control pens received all of the procedures described above (epidural, surgery prep, flunixin meglumine), but their tails were not removed. Calves were weighed every 28 days and monitored for evidence of tail infection, lameness and other health issues. Carcass data was collected at slaughter. Average daily gain, feed efficiency, morbidity indices, and carcass parameters were calculated and compared between the groups.

Results

Calves were maintained on feed in a slotted floor facility for 160 days. No significant difference was noted in average daily gain, feed efficiency, or carcass quality traits between the two experimental groups. At the end of the study, there were more tail lesions in calves with tails (n=12) when compared to calves with docked tails (n=1) ($P=0.004$), however, there was no difference in the incidence of lameness between the groups ($P=0.10$). No other differences in health indices were found.

Significance

The incidence of tail lesions was higher in calves without docked tails, which supports field reports and earlier studies. However, there were no resulting adverse health effects. In addition, there was no difference in performance or carcass quality. In this study, using the housing and management systems described, tail docking was of no benefit when compared to cattle that had intact tails. Care must be taken in extrapolating these findings to different housing and management systems, however, this is the first evidence that routine tail docking of feedlot cattle is of little benefit.