Tail docking causes neuroanatomical changes to pig tails

When pigs have their tails docked this causes neuroanatomical changes at the nerve endings where the nerve has been cut. These changes may affect the sensitivity of the tails to pain.

Neuroanatomical changes at the nerve endings, where the nerve has been cut, may affect the sensitivity of the tails to pain.

In conventional pig production most of the piglets will have their tails docked a few days after birth to try to avoid problems with tail biting later in life. A gas-operated tail docker is typically used for this purpose.

A study conducted by researchers at the Department of Animal Science, Aarhus University, in collaboration with the University of Copenhagen, has shown that when pig tails are docked neuromas may develop. Neuromas are thickened nerve endings that are created where the nerve is cut. These changes may affect the sensitivity of the tails to pain.

Tail docking studied

The scientists have studied the impact of tail docking and the length removed on the tail length at slaughter and on the formation of neuromas in the remaining stump at slaughter. The experiment was conducted at the Department of Animal Science at Aarhus University, and included four treatments:

- Pigs with intact tails
- Tail docked with 75 percent of tail remaining
- Tail docked with 50 percent remaining
- Tail docked with 25 percent remaining

In the study, pigs were slaughtered at about 22 weeks of age. A total of 65 tails were studied for the presence of neuromas after slaughter.

More nerve growth in docked tails
The different docking lengths led - at the time of slaughter - to obvious differences in tail lengths. The results of the study also show that modern docking techniques lead to neuroanatomical changes in the form of neuromas in the healed tail endings, and that this was

the case for both short and long tail stumps. Whether these neuromas lead to changes in the animals' sensitivity to pain requires further investigation.

The scientific paper "Effects of tail docking and docking length on neuroanatomical changes in healed tail tips of pigs" can be obtained from Senior Researcher Mette S. Herskin or downloaded from here.

Source: Aarhus University

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