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Spinal cord abscess in pork carcasses

JI-Yon Seo*, Jae-Yoon Ryu, Jae-Myoung Park

Chungbuk Veterinary Service Laboratory, Chungju, 380-230. Korea
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Abstract

This is a case report of spinal cord abscess in pork carcasses. We have detected 7 cases with spinal cord abscesses in abattoir from January to October 2008. It may occur from either direct extension or hematogenos infection. Four cases were presumed by hematogenous infection because of no external wound, and 3 may be caused by direct extension. The infection is a result of external wound in 3 pigs and is a result of hematogenous spread in 4 pigs. The incidence rate of spinal cord abscess in sows is higher than that in pigs

Key words : Spinal cord, Abscess, Pork carcasses, Slaughter house.

*Corresponding author
Phone : +82-43-220-5620, Fax : +82-43-220-5629
E-mail : 1004vet@hanmail.net

Introduction

Spinal cord abscess is a disorder characterized by inflammation and a collection of infected material around the spinal cord.
This infection is classified as osteomyelitis if it is located in the vertebra or as discitis if it located in the intervertebral disc, or as epidural abscess when it is found between the outer covering of the spinal cord (dura matter) and the bones of the spine.

Usually, it is very rare that discitis and osteomyelitis occur independently. Spinal cord abscess usually occurs as diskospondylitis that is compositive infection between the vertebrae and the intervertebral discs [1].

Spinal cord abscess may occur from either direct extension or hematogenous infection. The risk of infection increase in case of boils on the skin, back injury and any infection through the blood-stream from another body location. However, in up to one-third of cases, there is no identified

source of infection. The infection is usually bacterial, often a result of staphylococcus infection. In some rare cases, it may be fungal or viral.

The bone infection may trigger formation of epidural abscess which enlarges and rapidly compresses the spinal cord, causing neurological symptoms and signs including weakness, paresthesia, dysesthesia, bladder and bowel incontinence, and acute paraplegia[2].

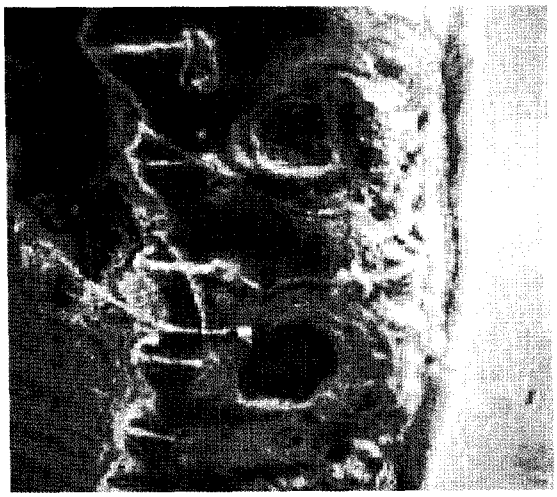

Fig 1. Osteomyelitis at the thorasic vertebra

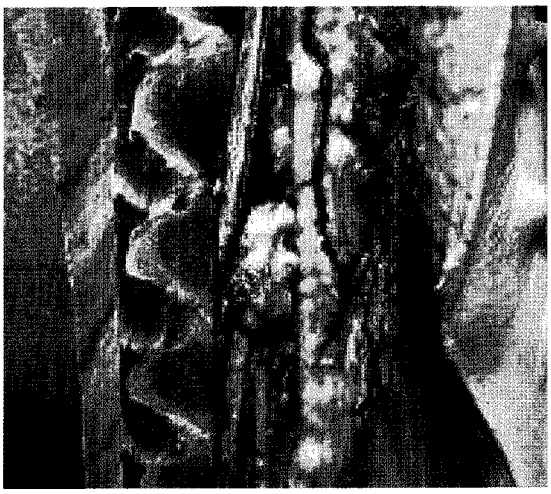

Fig 2. Diskospondylitis at the lumbar vertebra

Fig 3. Lumbar spinal abscess by back injury

Fig 4. Sacral spinal abscess by gluteal injury

Symptom

There were 7 cases of spinal cord abscess (2 cases in sow, 5 cases in pigs) at 4 abattoirs in 2008. Four of them were presumed by hematogenous infection because there were no external wound (Fig 1, Fig 2). Three were caused by direct extension because the abscess occurred following back injury in 2 cases (Fig 3) and gluteal

injury in 1 case (Fig 4). The wound region was spreaded to vertebra.

Three cases were identified as osteomyelitis (Fig 1) and 2 cases as diskospondylitis (Fig 2). In the others , however, pus was formed so severe that spinal cord abscess type can not be classified.

Discussion

Spinal cord abscesses occur more frequently in sow than in hog. Treatment usually includes antibiotics given for at least 4-6 weeks and surgery needed to drain or remove the abscess. But it is not econo- mical in the domestic animals. Moreover spinal cord abscess in slaughtered animals is one of the totally disusing diseases.

Therefore prevention is more important than treatment. And the right treatment of certain infections, such as boils on the skin, tail docking, back trauma, and blood stream infections, may decrease the risk of spinal cord abscess.

References

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