

round cells and minority of spindle shape cells. Accumulated neoplastic cells were pleomorphic and had clear nucleolus and eosinophilic cytoplasm. Some neoplastic cells also infiltrated to subcutaneous adipose tissue and muscular layer. There were severe hemorrhage, necrosis and thrombosis in the subcutis of skin. Immunohistochemically, many neoplastic cells demonstrated positive reactions for CD3, and negative for CD79a. Small number of cells also showed positive reactions for lysozyme.

Conclusions: Based on the histopathologic and the immunohistochemical results, subcutaneous mass at the rump of South American sea lion was confirmed as T-cell origin cutaneous lymphosarcoma.

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Detection of LOM strain vaccine virus in porcine aborted fetuses in Jeju

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Introduction: Classical swine fever (CSF) is a highly contagious, multi-systemic hemorrhagic viral disease in pigs that may manifest as peracute, acute, chronic, or prenatal form diseases [2, 3]. CSF virus (CSFV) is small, enveloped, positive, single-strand RNA virus in the genus *Pestivirus* of the family *Flaviviridae*. CSFV is able to cross the placenta of pregnant sows and infect fetuses at any stage of pregnancy. Various CSF vaccines such as live vaccine, DNA vaccine, subunit vaccine, and recent marker vaccine are available in many countries [2]. Since 1974, CSF live vaccines (LOM strain) have been widely used to control CSF in domestic pigs in Korea [3]. In contrast with Korea mainland, Jeju province had been CSF free and pigs reared in Jeju had not been vaccinated against CSF for more than fifteen years [1]. In the present study, we describe the detection of LOM strain vaccine virus in porcine aborted fetuses in Jeju.

Materials and Methods: A total of 18 porcine aborted fetuses from 3 pig farms of Jeju island were submitted to the Diagnostic Laboratory of Jeju Self-Governing Provincial Veterinary Research Institute from 2015 to 2017. Necropsy was performed and collected visceral tissues were fixed in

10% buffered formalin, embedded in paraffin, sectioned at 2/μm and stained with hematoxylin and eosin. Polymerase chain reaction (PCR) and immunohistochemistry (IHC) were performed to clarify the causative viral pathogens in aborted fetuses.

Results: LOM strain vaccine virus were detected in 18 porcine aborted fetuses. These LOM positive fetuses were classified into 9 stillbirth fetuses (2 farms) and 9 aborted fetuses (1 farm) at 50-80 days of gestation, respectively. All aborted fetuses were only LOM vaccine virus positive without any viral pathogens such as porcine parvovirus, pseudorabies virus, encephalomyocarditis virus, Japanese encephalitis virus, porcine circovirus type 2 and porcine reproductive and respiratory syndrome virus.

Conclusions: Based on the results of this study, LOM strain vaccine virus induced porcine abortion in the pig farms in Jeju. CSFV Trans-placental infection of CSFV can result in abortion, fetal mummification, stillbirth, and congenital malformations including cerebellar hypoplasia, microencephaly, and pulmonary hypoplasia [2]. However, the precise route of vaccine virus is still unclear in Jeju. Therefore, more in-depth study for the epidemiologic aspects for LOM strain vaccine should be warranted.

References

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Basal cell carcinoma of two cats

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Introduction: Basal cell carcinomas are common in the cat, uncommon in dog and rare or unknown in other animal species [2]. Cats and dogs between 3 and 14 years old are affected. [1]. There is a higher incidence in females