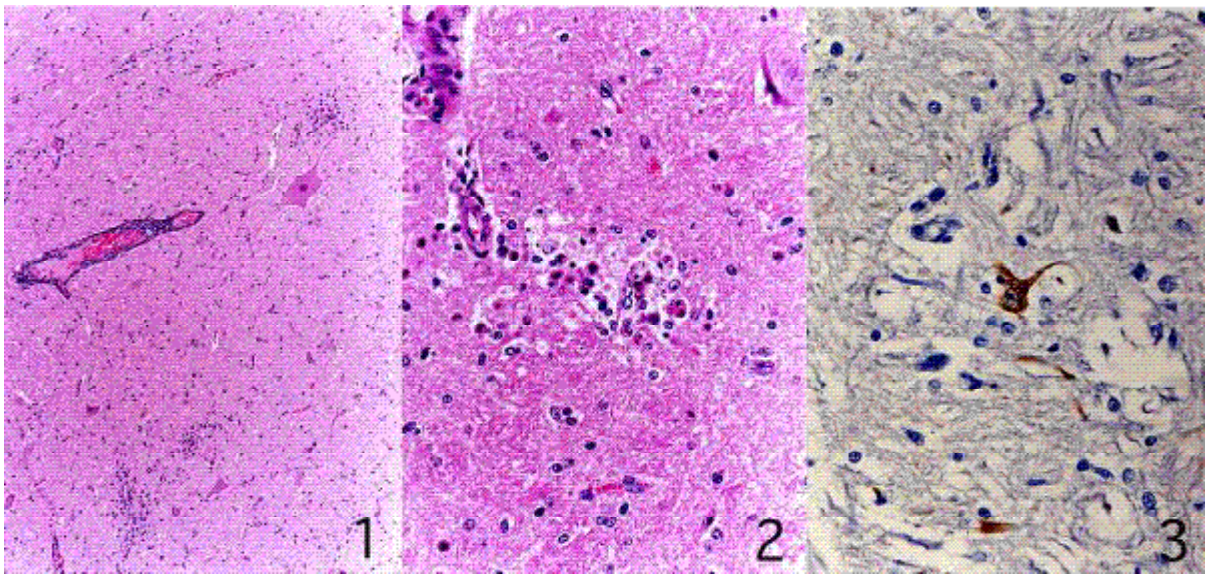

No.827　ウシの大脳　　ソウル大学

[Animal] Bovine, cow, female, 5 years old.
[Clinical summary] The cow was euthanized due to neurologic signs including hypersensitivity, tremor, locomotor ataxia or lameness. The cow was from a farm where the morbidity was about 30%. Abortions and congenital abnormalities were not observed in that farm.
[Gross findings] No significant gross abnormalities were found.
[Histological findings] Typical lymphohistiocytic inflammation characterized by perivascular mononuclear cell infiltration, gliosis, neuronophagia, and neuronal loss were noted in the brain and the ventral horn gray matter of the spinal cord (Figs. 1 and 2). The lesions in the brain were most prominent in the pons and medulla oblongata. Akabane virus antigen was detected in the brain by immunohistochemistry (Fig. 3) .
[Diagnosis] Encephalomyelitis due to Akabane virus infection
[Discussion] Recently, Akabane disease outbreaks were reported in 5-month-old bull calf and 1- to 27-days old calves in Japan, suggesting that Akabane virus is a potential cause of encephalitis in young cattle outside the neonatal period. A highly virulent Iriki strain of Akabane virus has the potential to cause encephalitis in cattle through postnatal infection. This is the first report on the natural Akabane virus infection in adult cattle in Korea.
[Reference] Lee, J.K., Park, J.S., Choi, J.H., Park, B.K., Lee, B.C., Hwang, W.S., Kim, J. H., Jean, Y.H., Haritani, M., Yoo, H.S., and Kim, D.Y. Veterinary Pathology (in press).