



HOKKAIDO UNIVERSITY

Title	LEUKOMYEIODEGENERATION IN TWO AGED GERMAN SHEPHERD LITTERMATES : PATHO-MORPHOLOGICAL OBSERVATIONS
Author(s)	AMANAI, Hideki
Citation	Japanese Journal of Veterinary Research, 35(2), 121-121
Issue Date	1987-04-30
Doc URL	https://hdl.handle.net/2115/3038
Type	departmental bulletin paper
File Information	KJ00002374480.pdf



LEUKOMYEIODEGENERATION IN TWO AGED GERMAN SHEPHERD
LITTERMATES : PATHO-MORPHOLOGICAL OBSERVATIONS

Hideki AMANAI

*Department of Comparative Pathology
Faculty of Veterinary Medicine
Hokkaido University, Sapporo 060, Japan*

Two aged German Shepherd littermates, showing progressive neurological signs such as posterior weakness-to-staggering, spastic paralysis and diminished pupillary reflex, were patho-morphologically observed.

Main macroscopical features consisted of an increase of the cerebrospinal fluid, spinal cord having a transparent tingle at the marginal parts, and posterior muscular atrophy.

Main histopathological features were as follows : (a) nerve fiber degeneration in all the funiculi throughout the entire spinal cord, the degeneration being more severe in the thoracic and lumbar regions ; (b) nerve fiber degeneration in the white matter of the marginal parts of the posterior brain stem ; (c) optic nerve degeneration ; (d) existence of DNA-positive inclusion bodies in the axons in the spinal funiculi ; (e) existence of ultrastructures, such as minute-particle aggregated structures including minute virus-like particles and DNA-fibers, in the spinal funiculi ; (f) existence of the same minute-particle aggregated structures as those observed in the spinal cord in astroglia in the optic nerve.

The present dog disease was tentatively termed "canine leukomyelodegeneration".