

NCL Description for Japanese Retrievers

Age of onset of clinical signs: 3 years

Age of death or euthanasia: 3 years

Abnormalities often observed by the owner:

Mental changes: Unknown

Changes in gait and posture: Unknown

Visual abnormalities: Unknown

Seizures/convulsions: present

Other changes: polydipsia (excessive thirst)

Abnormalities observed upon clinical examinations:

Clinical neurologic changes: Unknown

Clinical ophthalmic changes: Unknown

Visual abnormalities: Unknown

Retinal changes: Unknown

Electroretinography (ERG): not assessed

Other clinical findings: Unknown

Histopathology

Brain: Gross examination – Unknown. Light microscopy – conglomerates of granules of similar tinctorial reactions in hillock of neurons of neuraxis, deposition prominent in cerebral cortex. Electron microscopy – variable numbers of small to large, membrane-bounded granules in cytoplasm of smooth muscle, nerve, astroglia and macrophages. Pigment autofluoresced under UV

Eyes: Retinal pigment epithelial cells on nontapetal region of central retina were swollen and contained large amounts of basophilic, weakly PAS positive, and acid-fast granules

Other organs and structures: lung, kidney, adrenal gland, liver, spleen, lymph nodes, bone marrow

Mode of inheritance: Unknown

Gene containing mutation: Unknown

References:

Umemura T, Sato H, Goryo M, Itakura C. Generalized lipofuscinosis in a dog. Jpn J Vet Sci 1985; 47:673-677.