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**MESOTHELIAL PROLIFERATION IN THE MENINGES AND SYNOVIAL
MEMBRANE OF HORSES AFFECTED WITH
“EQUINE INCOORDINATION”**

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Eleven horses (Case Nos. 1-11) aged 11 to 38 months, which were clinically and histopathologically diagnosed as “Equine Incoordinations (duration of illness was 1 to 17 months), were histopathologically investigated with special focus on the meninges and synovial membranes.

The investigations were performed under the great impetus from TSUBOUCHI's observations (1980) on “Equine Incoordination”-affected horses which were used the object of his arthropathy study.

In all of the horses, the following lesions of the nervous system which are pathognomonic of “Equine Incoordination” were observed: leukomyelodegeneration, white substance degeneration in the limbic areas of the posterior brain stem, optic nerve degeneration, formation of minute eosinophilic cytoplasmic inclusion bodies, etc.

Mesothelial proliferation was frequently observed in the dura mater of the medulla oblongata (in 8 out of 10 horses examined), in the meninges of the spinal cord (all 11) and in the sheaths of the optic nerve.

Considering this in connection with TSUBOUCHI's observations, it is probable that such proliferation occurs in a high rate in “Equine Incoordination”- affected horses.

Mesothelial proliferation and edematization were frequently observed in the synovial membranes in all of the horses; mesothelial proliferation occurred in 60 out of 70 articular capsules and edematization in all of the 70 capsules. In evaluating these findings along with those of TSUBOUCHI, it was considered that such synovial events probably occur in a high rate in “Equine Incoordination”-affected horses.

Fine rhabdoid eosinophilic cytoplasmic inclusion bodies were found in the mesothelium of the dura mater of the medulla oblongata (Case Nos. 4, 7, 8 & 10), the nerve cells of the spinal ganglion (No. 2), the nerve cells of the trigeminal ganglion (No. 8), and the synovial mesothelium of the tarsal articular capsule (No. 9).