

研究業績 英文表記

和文	
表題	アフリカツメガエル変態時における視神経の形態変化―髄鞘の崩壊と軸索の変形過程―
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英文	
Title	Morphological changes in the optic nerve of <i>Xenopus laevis</i> during metamorphosis - The process of degradation of the myelin sheaths and morphological changes in axon -
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Abstract	The morphological changes in the larvae of amphibians during metamorphosis are quite evident. In <i>Xenopus larvis</i> , the optic nerve is approximately 4 and 2 mm in length before and after metamorphosis, respectively, and these changes are rapid. In the present study, the optic nerves of <i>Xenopus laevis</i> were observed under a transmission electron microscope, at the early, middle, and late stages (St.55, St.58 and St.59, respectively) of metamorphosis. At St.55, the cross-sectional and the longitudinal views showed that the optic nerve fibers had almost normal morphology. At St.58, the cross-sectional view showed that the axons had an irregular shape, and the myelin debris was present inside and outside the myelin sheath. At St.59, the morphological changes were more pronounced. It is believed that the reduction in the length of the optic nerve is due to the aforementioned morphological changes in the nerve fibers that occur during metamorphosis.
keyword	nerve, myelin sheath, metamorphosis, <i>Xenopus</i> , TEM

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