

Cytoskeleton abnormalities in axonopathies of unknown aetiology: correlations with morphometry

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Résumé en anglais	<p>To determine if specific axonal cytoskeleton abnormalities could be demonstrated in axonopathies without aetiology, nerve biopsies from five controls and nine cases were analyzed by morphometry and immunocytochemistry with anti-neurofilament (NF, subunits L, M, H) and anti-beta tubulin (TUB) antibodies. Morphometry revealed either large fiber atrophy (decrease in large fiber density with increased density in small fibers), degeneration of large fibers (decrease in large fiber density and in total density of fibers) or of all diameter fibers. NF immunostaining density decreased (by 21-89%) only in cases with fiber loss, in parallel to myelinated fiber density as determined by morphometry. On the contrary, the density of fibers labelled for TUB increased significantly in all except two cases by 52-102% over controls. Nevertheless, in these two cases--with a severe loss of fibers--as well as in other cases, the ratio of the density of fibers labelled for TUB and NFL (TUB/NFL) increased by 48-404%. Thus, the total density of myelinated fibers was always inversely correlated with the TUB/NFL ratio. Similar abnormalities have been described only after axotomy; our cases could thus be compared to .</p>
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Liens

- [1] <http://okina.univ-angers.fr/ca.fr/publications>
- [2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26354>
- [3] <http://okina.univ-angers.fr/franck.letournel/publications>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=653>
- [5] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26355>
- [6] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=655>
- [7] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1002>
- [8] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1072>
- [9] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=22435>
- [10] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=14225>
- [11] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=10420>
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- [23] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=10048>
- [24] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=22440>
- [25] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=14259>
- [26] <http://okina.univ-angers.fr/publications/ua15663>
- [27] [http://dx.doi.org/10.1016/S0022-510X\(02\)00025-4](http://dx.doi.org/10.1016/S0022-510X(02)00025-4)
- [28] <http://www.sciencedirect.com/science/article/pii/S0022510X02000254>
- [29] <http://www.ncbi.nlm.nih.gov/pubmed/11959157?dopt=Abstract>

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