Fig 16. Left: thinly myelinated fibers in a shadow plaque located below the left inferior olivary nucleus as seen in Figure 1. Right: corresponding area in opposite pyramidal tract showing normally myelinated fibers. Luxol fast blue—periodic acid-Schiff. Magnification ×400.

Fig 17. Case 1. A perivascular cuff of mononuclear cells located in otherwise normal tissue close to the body of the lateral ventricle. Left: hematoxylin and eosin. Right: Luxol fast blue—periodic acid-Schiff. Magnification ×100.

Fig 18. Case 1. Edge and center of an actively demyelinating lesion in the corpus callosum. Left: intact white matter at the lesion margin shows several apoptotic oligodendrocytes. Right: at the lesion center located 3 mm deep to the margin, chains of regenerated oligodendrocytes are present in tissue packed with lipid macrophages. Hematoxylin and eosin. Magnification ×400.


Fig 20. Lesion illustrated in Figure 19 A. Left: within the lesion. Note absence of normal appearing oligodendrocytes and presence of apoptotic nuclei. Right: immediately adjacent unaffected white matter. Hematoxylin and eosin. Magnification ×400.

Fig 21. Lesion illustrated in Figure 19 B. Apoptotic cells are unreactive for the leucocyte/microglial marker CD45. Immunostained for CD45. Magnification ×630.
Fig 22. Junction between bordering white matter and a zone of vacuolated myelin at the edge of a lesion not associated with a penumbra of apoptotic oligodendrocytes. Note absence of oligodendrocytes in vacuolated tissue. Hematoxylin and eosin. Magnification ×400.

Fig 23. Although some interrupted axons were observed in the early lesions examined in the present study, the most common alteration was not an initial swelling or interruption of axons but a pronounced spatial re-arrangement due to the presence of tightly packed swollen macrophages. Stained for myelin (Luxol fast blue) and axons (silver). Magnification ×400.