Histochemistry of myelin. XII. Anionic straining of myelin basic proteins for histology, electrophoresis and electron microscopy.

Adams CW, Bayliss OB, Hallpike JF, Turner DR.

Abstract— Phosphotungstic acid haematoxylin, trypan blue and amidoblack techniques have been developed as anionic dye methods for staining myelin basic proteins. All methods displayed central and peripheral nervous system myelin in histochemical prepa rations and stained brain basic proteins in electrophoretic polyacrylamide gels: phosphotungstic acid haematoxylin appeared to be the most selective of these techniques. Electron photomicrographs of peripheral nerve stained by phosphotungstic acid haematoxylin showed that the major part of myelin basic protein is located in the period dense line. The basic proteins stained by phosphotungstic acid haematoxylin showed an early loss in rat sciatic nerve undergoing Wallerian degeneration and had completely disappeared from the centre of 20 plaques of multiple sclerosis.