

**Figure 2**

Inflammation and demyelination in sections of lumbar spinal cord from control, EAE and EAE + NAC (n = 12) treated Lewis rats. The spinal cords were isolated at peak manifestation of the disease (i.e. clinical score 5 in EAE and 3 in EAE + NAC treated animals). Photomicrographs represent regions from a) anterior cord b) central region and c) lateral cord. BV-denotes blood vessel. A. H&E staining of cross-sections of lumbar spinal cord. Compared to the control group, Lewis rats with EAE demonstrated gliosis (single arrow) and perivascular (double arrows), meningeal and interstitial chronic inflammatory infiltrates. These effects were attenuated in sections from EAE+NAC treated animals. B. LFB-PAS staining of cross sections of lumbar spinal cord from control, EAE, and EAE+NAC treated Lewis rats. Compared to the control animals, the interface of normal to demyelinating plaque (arrowhead) is notable in sections from the EAE group of animals. Myelin persists in the plaque as globules in the cytoplasm of macrophages. The EAE+NAC group showed demyelination, but to a lesser degree than that seen in the untreated group.