Magaki et al. review the clinical and pathologic features of HPA and characterize the inclusions and brain tissue in which they are seen in surgical resection specimens from five patients with intractable epilepsy and HPA compared to five patients with intractable epilepsy without HPA using immunohistochemistry for filamin A, previously shown to label these inclusions, and a variety of astrocytic markers including aldehyde dehydrogenase 1 family member L1 (ALDH1L1), SRY-Box Transcription Factor 9 (SOX9), and glutamate transporter 1/excitatory amino acid transporter 2 (GLT-1/EAAT2) proteins. The inclusions were positive for ALDH1L1 with increased ALDH1L1 expression in areas of gliosis. SOX9 was also positive in the inclusions, although to a lesser intensity than the astrocyte nuclei. Filamin A labeled the inclusions but also labeled reactive astrocytes in a subset of patients. The immunoreactivity of the inclusions for various astrocytic markers and filamin A as well as the positivity of filamin A in reactive astrocytes raise the possibility that these astrocytic inclusions may be the result of an uncommon reactive or degenerative phenomenon [1)]

1)
Magaki S, Haeri M, Szymanski LJ, Chen Z, Diaz R, Williams CK, Chang JW, Ao Y, Newell KL, Khanlou N, Yong WH, Fallah A, Salamon N, Daniel T, Cotter J, Hawes D, Sofroniew M, Vinters HV. Hyaline protoplasmic astrocytopathy in epilepsy. Neuropathology. 2023 May 17. doi: 10.1111/neup.12909. Epub ahead of print. PMID: 37198977.