ABSTRACT
Polymorphous low-grade adenocarcinoma (PLAC) and pleomorphic adenoma (PA) of minor salivary glands bear a superficial histological and immunophenotypic resemblance to each other, but can usually be separated by conventional microscopic examination. However, this is not always so, such as with PA displaying minimal or no mesenchymal components, and when only limited tissue from small biopsies is available for study. In such case, it is hard to differentiate between PLAC and PA.
Five cases of PLAC and 7 cases of PA have been studied ultrastructurally and immunohistochemically using the glial fibrillary acidic protein (GFAP) antibody. The results showed the 7 cases of PA to be moderately to strongly positive for GFAP. However, no staining for the same antibody was detected in the 5 cases of PLAC. Ultrastructural results showed that both PA and PLAC consisted of proliferated epithelial and myoepithelial cells, with the prominent presence of the later cells in PA.
The results support the role for GFAP in differential diagnosis between PLAC and PA of minor salivary glands.