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Myoepithelial differentiation in breast carcinoma

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ABSTRACT

Background. The aim of presenting this work is to describe a matrix producing carcinoma with anaplastic myoepithelial cell foci, with the coexistence of *in situ* myoepithelial carcinoma which originated from a sclerosing adenosis.

Case report. A 51-year-old perimenopausal woman presented with a hard irregular lump in her left breast. After histological confirmation of malignancy, the patient underwent a modified radical mastectomy. The tumor was composed of a sclerosed fibroadenoma and preexisting sclerosing adenosis with poorly differentiated overt carcinoma within the cartilaginous matrix. There were foci of ordinary, intermediate-grade carcinoma *in situ* and myoepithelial carcinoma *in situ*.

Results. We performed immunohistochemistry by the streptavidin-biotin horseradish peroxidase method. Estrogen receptor and progesterone receptor were negative, and so was c-erbB-2. Both the invasive and the *in situ* components were positive for CK7, CK19, CK14, vimentin, smooth muscle actin, nerve growth factor receptor, and epidermal growth factor receptor. By contrast, CK5/6 immunoexpression was found only in the *in situ* component. Negativity was found for p63 and CD10 within the tumor. While cytoplasmic bcl-2 immunoexpression was detected in some of the tumor cells of the invasive component, intranuclear p53 expression was found to be positive not only in the invasive component but also in the *in situ* component of the tumor.

Conclusion. The histopathological findings and the immunohistochemistry results support the derivation of the tumor from myoepithelial cells.

Key words: *myoepithelial cells, matrix producing carcinoma, breast, immunohistochemistry.*

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