

Lipid-rich carcinoma of the breast. A clinicopathological study of 49 cases

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ABSTRACT

Aims and background. Lipid-rich carcinoma is a very rare variant of breast cancer with an aggressive clinical course and poor prognosis. The present study aimed to explore its clinicopathologic characters.

Methods and study design. We reviewed 3,206 cases treated in two centers in the last 10 years. They all met the criteria of positive oil red O staining, were PAS negative and had the typical histological features included in the study. Their clinical data were collected. The expression of estrogen and progesterone receptors, HER2 and Ki67 was evaluated by immunohistochemistry.

Results. Forty-nine patients were diagnosed with lipid-rich carcinomas. They were all female and ranged in age from 22 to 72 years (mean, 45). The presenting symptoms included a breast mass or lump and nipple discharge. Axillary lymph node metastases were found in 79.2% of the patients at the time of surgery. Respectively 100% and 89.8% were negative for estrogen and progesterone receptors, whereas 71.4% were positive for HER2. All patients received surgery plus chemotherapy with or without radiotherapy. *In vitro* MTT assay showed taxol- or platinum-based chemotherapy to be the most effective. The 2- and 5-year overall survival rates were 64.6% and 33.2%, respectively.

Conclusions. Lipid-rich carcinoma has a biopathological profile significantly different from other types of breast cancer, with a predominance of unfavorable prognostic parameters. Early diagnosis and active treatment may be helpful to increase its overall survival.

Key words: *adjuvant, breast, chemotherapy, lipid-rich carcinoma, prognostic factor.*

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