Primary small cell carcinoma of the breast: report of seven cases and review of the literature

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Aim and background. The aim of the study was to analyze the clinicopathological characteristics, treatment modalities, and clinical outcome of patients with primary small cell carcinoma of the breast.

Methods. Fifty-three cases of primary small cell carcinoma of the breast were identified; 7 cases in this series and 46 from the English-language medical literature.

Results. There were 52 females and 1 male. The mean age was 53 years. Tumor size ranged from 1 to 18 cm (mean, 4.53). Axillary node metastasis was present in 61.7%. Only one patient had distant metastases at presentation. The presence of hormone receptors was reported in 24.5% of the tumors. Modified radical mastectomy was the most common surgical procedure and was performed in 50.9% of the patients. Adjuvant radiotherapy was administered to 39.6% of the patients, and 69.8% underwent chemotherapy. Thirteen percent of patients received adjuvant tamoxifen therapy. The mean follow-up was 20.75 months (range, 3-60), and 10 of 53 cases (18.9%) died of metastatic disease.

Conclusions. The prognosis of primary small cell carcinoma of the breast largely depends on the initial stage of the disease. Multimodality treatment including surgery, radiotherapy and chemotherapy seems to be the most appropriate strategy for early disease. Chemotherapy is usually unsuccessful in treating metastatic disease.

Key words: breast, chemotherapy, radiotherapy, small cell carcinoma, surgery.

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