

THE EVALUATION AND TREATMENT IMPLICATIONS OF PULMONARY NODULES IN PATIENTS WITH A RECENT HISTORY OF BREAST CANCER

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Introduction: In practice, breast cancer patients with pulmonary lesions are often assumed to have metastatic disease and are treated palliatively. A significant proportion of these lesions may actually represent a primary lung tumor. We sought to evaluate the incidence of breast/lung presentation and subsequent outcome.

Methods: 10-year retrospective review from a cancer registry in a community hospital system.

Results: 5,831 patients with breast cancer were identified. Sixty had pulmonary nodules without evidence of other distant metastases. Records were available for 33 who were treated for metastatic breast cancer (MBC) and 21 treated for primary lung tumor (PLT). PLTs included 14 non-small cell carcinoma, 3 small cell, and 3 carcinoid. Mean age was 60 years in MBC, versus 71 years in PLT ($p=0.004$). Mean breast tumor size was 3.4 cm in MBC, and 1.8 cm in PLT ($p=0.04$). Axillary lymph node involvement was seen in 16 of 33 patients in MBC (48%) versus 4 of 21 (19%) in PLT ($p=0.04$). Among patients with multiple lung nodules, 78% had MBC. Of those with PLT, 11 of 21 (52%) had early stage lung disease; 81% underwent curative resection.

Conclusion: Women with breast cancer and one or more pulmonary lesions without evidence of other metastatic disease require further workup of the pulmonary lesions. Although multiple pulmonary nodules and positive axillary nodes were likely to predict metastatic breast cancer, this was not universally true. Aggressive evaluation can afford treatment of early stage lung cancer which may impact overall survival.