

Breast Cancer Patients with Sarcoidosis Showing Up as Metastatic Lymphadenopathy

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Abstract

Breast cancer remains one of the most prevalent cancers worldwide, and its diagnosis and treatment continue to evolve. Sarcoidosis, a systemic granulomatous disease, presents a diagnostic challenge due to its diverse clinical manifestations. We present a case series of breast cancer patients initially suspected to have metastatic lymphadenopathy but were later diagnosed with sarcoidosis. This article aims to highlight the importance of considering sarcoidosis in the differential diagnosis of metastatic lymphadenopathy in breast cancer patients and the implications for management.

Keywords: Breast cancer; Sarcoidosis lymphadenopathy; Metastasis; Diagnosis; Management

Introduction

Breast cancer is a significant health concern affecting millions of women globally. Despite advances in diagnosis and treatment, the disease's heterogeneity often complicates its management. Sarcoidosis, characterized by non-caseating granulomas, can mimic various malignancies, including breast cancer, leading to diagnostic dilemmas. Here, we discuss cases where breast cancer patients presented with sarcoidosis masquerading as metastatic lymphadenopathy, emphasizing the importance of considering sarcoidosis in such scenarios [1,2].

Methodology

We present a series of cases where breast cancer patients initially presented with suspicious lymphadenopathy suggestive of metastatic disease. Case 1 involves a 54-year-old female with a history of invasive ductal carcinoma who presented with enlarged supraclavicular lymph nodes suspicious for metastasis. Further evaluation revealed non-caseating granulomas consistent with sarcoidosis. Case 2 describes a 47-year-old female with a recent diagnosis of triple-negative breast cancer who developed mediastinal lymphadenopathy during staging workup, later confirmed to be sarcoidosis. Both cases underscore the diagnostic challenge posed by sarcoidosis mimicking metastatic disease in breast cancer patients.

Distinguishing sarcoidosis from metastatic lymphadenopathy in breast cancer patients poses several challenges. Imaging findings, such as fluorodeoxyglucose-positron emission tomography/computed tomography (FDG-PET/CT), may demonstrate increased metabolic activity in affected lymph nodes, mimicking malignancy [3,4]. Fine-needle aspiration (FNA) or biopsy is often required for definitive diagnosis, although non-caseating granulomas may not always be evident, necessitating careful histopathological evaluation. Moreover, the presence of sarcoidosis can complicate cancer staging and treatment decisions, emphasizing the need for a multidisciplinary approach [5-7].

The management of breast cancer patients with coexisting sarcoidosis requires careful coordination between oncologists, pulmonologists and other specialists. Treatment strategies should prioritize controlling sarcoidosis-related symptoms while ensuring optimal cancer care. Systemic corticosteroids are the mainstay of sarcoidosis therapy, although their impact on cancer outcomes remains uncertain. Immunosuppressive agents may be considered for refractory cases but require close monitoring for potential complications [8-10].

Discussion

Sarcoidosis is a multisystem disorder with diverse clinical manifestations, including pulmonary, cutaneous, ocular and lymphatic involvement. Lymphadenopathy, a common presentation, can mimic metastatic disease in cancer patients, leading to unnecessary interventions and delays in appropriate management. The pathogenesis of sarcoidosis remains unclear, although evidence suggests an exaggerated immune response triggered by environmental factors in genetically predisposed individuals. The coexistence of sarcoidosis and breast cancer raises intriguing questions regarding shared etiological factors and potential immunological interactions.

Conclusion

Breast cancer patients presenting with suspicious lymphadenopathy should undergo a comprehensive evaluation to rule out sarcoidosis, particularly in cases where clinical or radiological findings are inconclusive. Awareness of this diagnostic challenge is crucial to avoid unnecessary interventions and ensure appropriate management. Further research is warranted to elucidate the relationship between sarcoidosis and breast cancer and optimize treatment strategies for affected individuals.

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