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Breast Implant-Associated Anaplastic Large-Cell Lymphoma: A Case Report

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Abstract

We present the case of a 52-year-old female who developed sudden, uncomfortable swelling in her right (reconstructed) breast and small, smooth, firm, mobile nodules with mastitis-like symptoms and without skin ulceration. Image studies and histo-cytopathology examination confirmed the presence breast implant-associated anaplastic large cell lymphoma. The patient was treated with implant removal.

Keywords Skin ulceration; Cell lymphoma; Intraductal carcinoma, Breast cancer

Introduction

Anaplastic large cell lymphoma is a very rare T-cell lymphoma and it has been found to be associated with breast implants. It is important to focus on awareness of breast physicians to improve early detection rates.

Case Presentation

A 52-year-old female was diagnosed with an intraductal carcinoma of the right breast pT2N0 after a mastectomy with breast reconstruction using an implant in July 2000. She was treated with six cycles of adjuvant chemotherapy (Cyclophosphamide, Doxorubicine, 5-Fluorouracil) and Tamoxifen for 5 years.

The patient remained disease-free for 13 years until a single, newly formed 6 cm supra-clavicle node was discovered which was accessible for biopsy. Histological examination of the specimen described a grade 3 triple negative intraductal carcinoma of breast cancer. At this point, the patient had received treatment with Paclitaxel-Bevacizumab, but after 3 cycles, the patient presented progression of her disease.



Figure 1 An intraductal carcinoma of the right breast.



Figure 2 Small, smooth, firm, mobile nodules on breast.

Therefore, the treatment was changed to a combination of Capecitabine and radiation therapy of the chest-wall and supraclavicular fosse, without any response.

One month later, the patient developed sudden, uncomfortable swelling in her right (reconstructed) breast and small, smooth, firm, mobile nodules with mastitis-like symptoms and without skin ulceration in **Figures 1 and 2**. Breast implant-associated anaplastic large-cell lymphoma (ALCL) ALK is negative.

Discussion

The entity of breast implant-associated ALCL was first described by Keech and Creech [1] in 1997, and currently at least 63 cases have been described in the literature [2]. A study in the Netherlands estimated that there is, on average, 1 out of 500,000 women with prosthesis per year [3].

The most common clinical presentation is unilateral breast swelling because of the periprosthetic fluid, which presents 1 year after surgery or as a palpable cutaneous mass or solid mass attached to the implant capsule [4].

ALCL is divided into two groups, the first being cutaneous ALCL, and the second being systemic nodal ALCL, which is subdivided into ALK-positive or ALK-negative disease. Typically, the ALK-positive ALCL is correlated with younger age groups and has a more favorable clinical outcome than ALK-negative ALCL. Breast implant-associated ALCL is commonly ALK-negative, despite this, the prognosis is generally favorable.

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