Secretory Carcinoma Breast: Presentation of a Rare Case

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Abstract

Secretory breast carcinoma is a rare breast cancer with indolent clinical behavior. It accounts for less than 0.15% of all breast cancers and is usually seen in children and young adults. Despite the low frequency, secretory breast carcinomas elicit pathologic interest because of their unique morphology and excellent prognosis. Normally, secretory carcinoma is seen in young age group. Its occurrence in older age group is rare. The authors hereby report a case of secretory breast carcinoma occurring in a 65-year-old female.

Keywords: Breast, Secretory carcinoma.

Introduction

Secretory carcinoma of the breast is a rare and indolent breast tumor with approximately 100 cases reported in the literature. It accounts for less than 0.15% of all breast cancers.1 It was originally recognized in 1966 by McDivitt and Stewart as an uncommon variant of breast carcinoma occurring in the pediatric age group and was described as "juvenile carcinoma."2 In 1980, however, Tavassoli and Norris reported a series of 19 patients including adults with a median age of 25 years and proposed the term "secretory carcinoma" which was established thereafter.3 Despite the low frequency, secretory breast carcinomas elicit pathologic interest because of their unique morphology and excellent prognosis.4 Normally, secretory carcinoma is seen in young age group. Its occurrence in older age group is rare. The authors hereby report a case of secretory breast carcinoma occurring in a 65-year-old female.

Case Report

A 65-year-old female presented in surgery outpatient department with a lump in the right breast. The lump was present for the last 25-30 years, and was gradually increasing in size. When it became painful 2 months back, the patient sought medical advice. On physical examination, a lump was noted in upper outer quadrant of the right breast. Retraction of the nipple was noted. The other breast and bilateral axilla were normal. Mammography revealed a round hyperdense mass with microlobulated margins (Fig. 1).

Trucut biopsy of the mass revealed the diagnosis of infiltrating duct carcinoma, breast. The patient underwent a right modified radical mastectomy and specimen was sent for histopathology. Grossly, a grey white tumor measuring 1.5×1.5×1 cm was seen in the upper outer quadrant (Fig. 2).

Microscopically, the tumor cells were arranged in tubular and microcystic pattern.

The cells had vacuolated cytoplasm along with presence of eosinophilic secretions (Figs. 3 and 4). On immunohistochemistry, tumor cells were negative for ER, PR and Her2 neu. Thus, a final diagnosis of secretory carcinoma breast was given.

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Discussion

Secretory breast carcinoma is a slow-growing tumor and can mimic benign lesions, such as a fibroadenoma. The differential diagnoses include a wide range of benign processes or malignant lesions (i.e., cystic hypersecretory hyperplasia, juvenile papillomatosis with apocrine metaplasia or mucinous carcinoma, apocrine carcinoma and cystic hypersecretory carcinoma).5 Secretory carcinoma can be differentiated from most of the entities listed above, by demonstrating the absence of myoepithelial cell layer.
Secretory breast carcinoma is less aggressive in children than in adults. A mass with circumscribed margina and tumor size <2 cm are associated with a good prognosis. The gold standard treatment of patients with breast carcinoma is surgery. In children, local excision with sentinel lymph node biopsy or complete axillary dissection is preferred while in adults, conservative surgery, either simple or modified radical mastectomy, can be performed, depending on the tumor size and on the lymphonodial status. However, involvement of more than three nodes may indicate the risk of systemic spread to distant sites (i.e., lung, liver, bone and scalp) and a poor outcome. Latest findings show that secretory breast cancer has an immunohistochemical and genetic feature that can differentiate it from the more common ductal carcinoma of the breast. The detection of a frequent expression of ETV6-NTRK3 fusion gene could implement current diagnostic and therapeutic strategies such as with future targeted therapies.

**Declaration of Interest**

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**References**


