



A Case Report on Ectopic Breast Tissue in a 24-Year-Old Male

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Authors' contributions

This work was carried out in collaboration among all authors. Author RM wrote the first draft of the manuscript. Author HHA did literature review and writing of manuscript. Author MJ did review and critical analysis, proof reading and final approval of the manuscript. All authors read and approved the final manuscript.

Article Information

Editor(s):

(1) Dr. Fehmi Kaçmaz, Uskudar University, Turkey.

Reviewers:

(1) Ketan Vagholkar, D. Y. Patil University School of Medicine, India.

(2) A. Anandhi, Jawaharlal Institute of Postgraduate Medical Education & Research, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/57405>

Case Report

Received 04 April 2020

Accepted 09 June 2020

Published 24 June 2020

ABSTRACT

Accessory breasts, also known as polymastia, supernumerary breasts, or mammae erratica, is the condition of having ectopic breast tissue in addition to normal breasts. This may appear with or without nipples or areolae. The condition is more predominately seen in women, and less commonly in males. Even though a majority of the occurrence is completely benign, the condition also has marginal malignant potential.

Here we present a case of a 24-year-old male who presented with bilateral axillary swelling for the last six years. Surgical intervention was done, which proved to be glandular breast tissue on histopathological analysis.

Keywords: Accessory breast; ectopic breast; male breast.

1. INTRODUCTION

Accessory breast consists of any single or whole of the components of breast tissue that may be functional or not. The condition remains fairly

rare in men. Majority of the accessory breast tissue occurs along the thoracic or abdominal portions of the milk line, the rest of them present in axilla. The remaining locations may be anywhere along the milk line. Ectopic breast

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tissue can present anywhere in the body. Sometimes they result as a response to hormonal changes but are mostly benign but when malignant, it has a very poor prognosis. The diagnosis is largely clinical and it remains to be decided by governing boards issued guidelines that warrants a more thorough workup for this presentation. Surgical excision is the treatment of choice [1,2].

Here we discuss an occurrence of accessory breast tissue in a male patient.

2. CASE SUMMARY

A 24 year, male patient with no known comorbid presented to the Abbasi Shaheed Hospital, Surgical OPD with a complaint of swelling in both axilla for the last 6 years. He first noticed the swelling 6 years ago and saw an increase in size over time. It started off the size of a tennis ball but was not bothersome, but eventually, as the size increased, it started creating some discomfort to the patient. The patient has had no associated symptoms of hormonal imbalance, weight loss and had no history of breast cancer in the family.

On examination, swelling was around 8x8 cm in size on right side and 6x7 cm in size on the left side, well-circumscribed, soft and non-tender, with no scar marks or any discharging sinus, not adherent with the over lying skin or underlying structures, not associated with any other symptoms.

Primary diagnosis of the bilateral accessory breast was made and patient was prepared for surgery. Excision and biopsy were done under general anaesthesia. Per-operatively a 5x6 cm fatty tissue was excised on the right side and 5x5 cm on the left side. Postoperatively the patient was pain-free and tissue specimen was sent for histopathology and biopsy proved that the specimen was of normal glandular breast tissue,

not having any signs of inflammation or malignancy.

3. DISCUSSION AND CONCLUSION

Normal breast development begins in the fourth week, starting off as mammary ridges, also called milk lines. These are paired ectodermal thickenings that appear on the ventral surface of the embryo, extending from the axilla towards the midline and then as a down growth to the medial thigh. Under usual circumstances, the mammary ridges involute completely except at the level of the fourth intercostal surface of the anterior thorax where the mammary gland will later develop [1,2].

The condition in which the mammary ridges fail to regress completely is termed Supernumerary Breast tissue. This comes under the broader classification of Ectopic Breast Tissue (EBT), which in addition to supernumerary breast also includes aberrant breast tissue. It is termed Aberrant when the breast tissue lies outside of the milk line [3].

Approximately 67% of EBT occurs along the abdominal and thoracic portions of the milk line, another 20% occurring in the axilla. The remainder can present elsewhere along the milk line or in places outside of it [4-6].

The supernumerary breast can present either as Polythelia (accessory nipples) or Polymastia (accessory breast tissue). It is a condition more common in females but occurs in 1-3% of males. The ratio of men to women is 1:5, and incidence can vary based on ethnicity as well, with the highest rates of prevalence in Japanese individuals [7].

The Kajava classification of 1915 is still universally used as a system of differentiating the spectrum along which supernumerary breast can present.

Table 1. Depending on what components of the EBT manifests clinically

Class	Component of the breast present			
	Glandular tissue	Nipple	Areola	Hair
I (Complete Breast)	✓	✓	✓	✓
II	✓	✓		
III	✓		✓	
IV	✓			
V (Pseudomamma)		✓	✓	
VI (Polythelia)		✓		
VII (Polythelia Areolaris)			✓	
VIII (Polythelia pilosa)				✓

Furthermore, although most cases of EBT are stand-alone occurrences and are completely benign, they can also rarely present alongside of other endocrine pathologies like Kallman Syndrome characterized by gonadotrophic hypogonadism [8]. There is also evidence of Urogenital pathologies like polycystic kidneys and renal adenocarcinoma occurring alongside supernumerary breast [9].

Clinically, however, it is more common and relevant to evaluate the possibility of EBT with malignant transformation. Benign and malignant conditions are both reported to occur in EBT the same as in normal breast tissue [2,10].

It's worth noting that even though the incidence of breast tumors are rare as it is in men, the incidence is reported even less in EBT, however, if a tumour does exist, it is more like to be carcinomatous than benign [11]. In addition due to delays in diagnosis, the prognosis for breast cancer in EBT remains poor.

For this reason alone, it remains important to closely assess a male patient with EBT and clear all suspicions of its malignant potential. Lack of standardized guidelines in accessing EBT like the ones that exist for breast lumps can make a diagnosis and work up a diagnostic challenge.

It's worth investigating the incidences of EBT in the Pakistani setting and expanding it further by assessing the feasibility of evaluating said patients to exclude the possibility of side-along pathologies.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
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