

# Laktasyon Döneminde Gelişen Unilateral Meme Atrofisi Olguları

## Cases of Unilateral Breast Atrophy During Lactation

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### ÖZ

Unilateral meme atrofisi oldukça nadir görülen bir patoloji olup sıklıkla doğumsaldır. Edinsel olarak nadir olup laktasyon dönemi ile ilişkilendirilen olgu bulunmamaktadır. Bu sunumda laktasyon dönemi ile sırasında tek taraflı meme atrofisi gelişen 3 ayrı olgu sunulmuştur.

**Anahtar Kelimeler:** meme, atrofi, ultrasonografi

### ABSTRACT

Unilateral breast atrophy is a relatively rare pathology, and is most commonly seen as a congenital condition. To date, acquired form of this condition is rare and no case associated with lactation has been reported. In this report, we present three cases who developed unilateral breast atrophy during the lactation period.

**Key words:** : breast, atrophy, ultrasonography

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## INTRODUCTION

Breast atrophy is a condition which may cause cosmetic concerns among women, and its etiology involves factors such as hormonal insufficiency, suppression of the hormonal axis and the use of anabolic hormones. Breast atrophy caused by such factors is often bilateral (1). Unilateral breast atrophy due to congenital causes was also defined, and atrophy is present since the time of birth in such cases (2). Two cases of acquired unilateral breast atrophy were previously reported in the literature; the causative agent was identified as Epstein-Barr virus in one of these cases, while the other case was considered idiopathic with no identifiable cause (3,4). There is no previous report of acquired unilateral breast atrophy during lactation in the literature.

## CASE REPORT

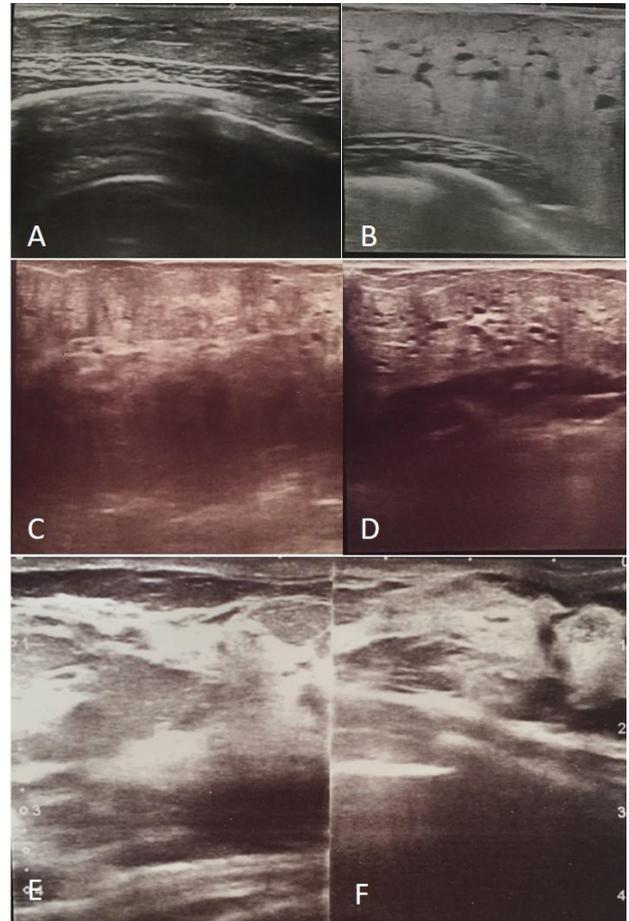
Three female patients, aged 20, 21 and 25 years, respectively, were admitted to our department with the complaint of breast asymmetry. Physical examination indicated different degrees of breast asymmetry in all three patients (**Figure 1**).



**Figure 1.** Clinical photograph showing smaller right breast (A) and left breast (B,C) in comparison to opposite breast in sitting posture.

The right breast of one patient and the left breast of the other two patients were smaller. For all patients, the smaller breast was normal in size before starting lactation and gradually decreased in size after the patients started lactating. The infants lactated less from the small breast and the amount of milk in the affected breast also decreased over time. All three patients experienced their first pregnancy and they were on the 10th, 16th and 14th months of lactation, respectively. The patients did not have any history of trauma, a chronic disease, regular medication use or an endocrine disorder. Their serum biochemistry, thyroid function and sex hormone levels were within normal range.

Ultrasonography showed decreased parenchymal thickness in atrophic breast tissue compared to the healthy breast (**Figure 2**).



**Figure 2.** Right (A,C,E) and left (B,D,F) breast ultrasound images in all patients

Ductus were dilated due to lactation. The patients had no accompanying cysts. Appearances were consistent with lactation period. The patients were recommended surgery, but they did not consent to the procedure.

## DISCUSSION

Mild differences between the sizes of the two breasts of a woman are not uncommon and considered as normal variations. These differences do not result in significant complaints, as long as they are not very apparent. On the other hand, Hueston et al. (5) reported that asymmetries more than 33% made it difficult for the individuals to cover up with daily clothing. Idiopathic breast asymmetry may occur due to hyperplasia or hypoplasia, and may be accompanied by chest wall pathologies. Breast hypertrophy frequently occurs bilaterally during pregnancy. Breast aplasia and

hypoplasia, on the other hand, are often developmental and associated with desensitization of the breast tissue to normal hormonal stimulation. Pathologies due to hormonal influences are also generally bilateral. Unilateral breast atrophy may occur due to congenital causes such as Poland syndrome, but these pathologies are also seen since the time of birth.

In a healthy developed breast, acquired volume loss may occur due to reasons such as burn scars, surgery, trauma, neoplasia, radiation or infection (2). Haramis et al. (3) previously reported a case of unilateral atrophy of a healthy developed breast caused by Epstein-Barr virus infection in the breast parenchyma. Marwah et al. (4) also identified unilateral atrophy in a lactating patient, but did not associate this with lactation. Nevertheless, all three cases described here had normal breast development but experienced atrophy starting with lactation period, suggesting that lactation may be considered as a stand-alone factor. Ultrasonography also demonstrated decreased thickness of the atrophic breast and ductal dilation associated with lactation was less pronounced in the affected breast. All these findings suggested a potential relation between the amount of milk, side of lactation and the breast size.

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