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Milk Fistula Developing From Accessory Breast After Laser Epilation, Case Report

Lazer Epilasyon Sonrasi Aksesuar Memeden Gelişen Süt Fistülü

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Abstract: Milk fistula is a rare condition characterized by the formation of a connection between the skin surface and the milk duct and spontaneous discharge of milk. It is most commonly seen after abscess drainage, biopsy or any interventional procedure. More rarely, spontaneous milk fistulas have also been reported. The occurrence of milk fistulas in the accessory breast is even rarer. In this study, we present a case of milk fistula that developed after laser hair removal in an accessory breast in a breastfeeding woman, which has not been reported in the literature before.

Keywords: fistula, laser, accessory breast

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Özet: Süt fistülü emziren kadınlarda deri yüzeyi ile süt kanalı arasında bir bağlantı oluşması ve buradan kendiliğinden süt boşalmasıyla karakterize nadir görülen bir durumdur. En sık abse drenajı, biyopsi yada girişimsel herhangi bir işlemten sonra görülür. Daha nadiren kendiliğinden gelişen süt fistülleride bildirilmiştir. Süt fistüllerinin aksesuar memede görülmesi ise daha nadir rastlanan bir durumdur. Bu çalışmada daha önce literatürde yayınına rastlanmayan emziren bir kadında aksesuar memede lazer epilasyon sonrası gelişen bir süt fistülü olgusunu sunduk.

Anahtar Kelimeler: fistül, lazer, aksesuar meme

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1. Introduction

Milk fistulas are a condition known as outflow of milk through the skin as a result of a connection between the skin and milk ducts in lactating women. Although the most common cause is abscess drainage, biopsy or surgical interventions, spontaneous development has also been reported (1,2). Accessory breast tissue may develop because the dorsum of the breast consisting of a portion of the galactic band extending from the axilla to the groin does not fully regress embryologically. The incidence of accessory breast tissue in women is between 2% and 6% in the general population (3,4). The most common location of accessory breast tissue is the axilla (5). Rarely, milk fistulas have been reported to develop in the accessory breast (6).

In this study, we presented a case of milk fistula developing in the axillary accessory breast after laser hair removal, which was not encountered in the literature reviewed.

2. Case Report

The case was a 28-year-old woman with a history of swelling and pain in the right axillary region that started with pregnancy and milk coming from the right armpit for the last 1 month in the postpartum lactational period. Our patient had a history of active breastfeeding for 8 months after delivery. The patient stated that she had

undergone axillary laser epilation 2 times in the last 3 months due to hair growth in the axillary region. After the 2nd session of laser hair removal, she stated that milk had been coming from the axillary region for the last 1 month. On physical examination, both breasts were normal and there was a finding compatible with an accessory breast measuring approximately 5 x 4 cm in the right axillary region. It was observed that milk was coming from the skin area on the accessory breast with provocation. Infection parameters were normal in blood tests. Prolactin level was normal. A fluid smear swab was taken from the axillary skin over the milk fistula. Microscopic smear examination revealed nipple discharge. Polymorph nucleated leukocytes and histiocytes were observed in the microscopic smear. On breast ultrasound, both breasts were normal and an accessory breast with a size of 43x35mm was found in the right axilla. Detailed dynamic breast MRI ordered for milk fistula showed right axillary accessory breast tissue. No ductal structure of the accessory breast in the right axillary region was detected on MRI. After evaluation with the results of the examinations, surgical excision of the accessory breast was recommended. However, since the patient was breastfeeding, we recommended surgery after 1 year of lactation. The patient accepted our recommendation and was called to the outpatient clinic for follow-up after 3 months.



Figure 1. Fistula shown by arrow



Figure 2. Milk fistula



Figure 3. Accessory breast shown by arrow in MR scan.

3. Discussion

Accessory breast is a congenital condition in which abnormal accessory breast tissue is present in addition to normal breast tissue. Although accessory breast tissue is usually found anywhere along the milk line extending to the inguinal region, it is most common in the axillary region. The incidence in women is 2% to 6%. Occurrence rates vary widely by ethnicity and gender, ranging from as low as 0.6% in Caucasian people to as high as 5% in Japanese women. The most common symptoms include swelling and tenderness of the affected area, thickening of the armpit, and restriction of shoulder range of motion. These symptoms usually worsen with the onset of puberty and pregnancy. Surgical excision is usually recommended in cases with accessory breasts in the presence of possible symptoms(8,9).

A few cases of milk fistula developing from an accessory breast were found in the literature. These cases usually developed after fine needle (core) biopsy or spontaneously developed milk

fistula cases. We think that this case is the first case of milk fistula developing from the accessory breast after laser epilation.

Trivedi et al. do not recommend permanent laser hair removal during pregnancy due to lack of safety data. They recommended waxing, shaving or using depilatory creams for hair removal during this period.

Gold et al. showed that the use of a laser module that combines three wavelengths (755, 810 and 1064 nm) in a single pulse is safe and effective for hair removal treatment in all skin types. They found a significant reduction in the number of hairs in all skin types. In addition, no side effects and complications were found in any case. In our case, after the second laser (755nm) epilation session, milk came from the skin on the accessory breast and milk fistula formed. We think that the fistula formation was triggered by the laser effect on the skin due to hypertrophy of the accessory

breast because our patient was in the lactational period. We do not recommend axillary laser epilation especially in women with axillary accessory breast in the lactational period. In this regard, we believe that dermatologists should definitely seek the opinion of the general surgeon if they suspect the presence of accessory breast in the axilla examination for women in the lactational period(8).

Laser devices, while having a wide range of applications, can cause serious complications if used incorrectly. Therefore, laser treatments should only be performed by trained professionals. Early detection and management of complications can reduce long-term health issues and the need for additional treatments. Furthermore, safety measures must be diligently followed by the entire team(9).

In addition to the previously discussed risks and complications, it is important to highlight that accessory breast tissue may present challenges in both diagnosis and management. Recent studies indicate that accessory breasts can sometimes

harbor malignancies, which underscores the need for careful monitoring and evaluation, especially during periods of hormonal fluctuation such as pregnancy and lactation (10). Furthermore, the influence of external interventions like laser treatments could alter the natural course of accessory breast-related complications, potentially leading to unusual outcomes like milk fistulas, as highlighted in this case (11). Therefore, multidisciplinary consultation remains crucial for optimal patient care in such instances.

4. Conclusion

The accessory breast is especially symptomatic during pregnancy and lactation. Although it presents with clinically insignificant findings, in women with accessory breasts, especially in the lactational period, if axillary laser permanent hair removal is considered, it should be kept in mind that milk fistula may develop from this area. Laser hair removal should be postponed in this period and, if necessary, surgical excision of the accessory breast should be postponed.

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