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# Diaper Dermatitte Anne Sütü Kullanımı

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#### Amaç:

Diaper dermatit, çocuk bezinin içinde kalan alanda görülen deri inflamasyonu ile karakterize bir kontakt dermatittir. Çocuklarda en yaygın görülen dermatit olan diaper dermatit prevalansı %7-35 arasında değişmektedir. Diaper dermatit tedavisinin iki amacı vardır. Bunlar; hasarlı dokunun onarımını hızlandırmak ve tekrarlamasını önlemektir. Fekal enzimlerle temasın azaltılması için yenidoğanda her saat daha sonraki dönemlerde 3-4 saatte bir bezin değiştirilmesi, cildin kuruması için havalandırılması bakımın temelini oluşturmaktadır. Bunun yanında bazı ek tedavi yöntemlerinden yararlanılabilmektedir. Bu literatür incelemesinde, diaper dermatitinde anne sütü kullanımının etkisinin incelenmesi amaçlanmıştır.

### Yöntem:

Bu literatür incelemesi çalışması; Ulakbim Tıp Veri Tabanı, Türk Medline, Pubmed veri tabanları taranarak yürütülmüştür. Literatür taramasında "diaper dermatit" ve "diaper dermatit ve anne sütü" kelimeleri ile bu kelimelerin İngilizce karşılıkları kullanılmıştır. Çalışmaya, Türkçe ve İngilizce dillerinde yayınlanmış olan deneysel çalışmalar dahil edilmiştir.

### **Bulgular:**

Yürütülen literatür taraması sonucunda diaper dermatitte anne sütü kullanımına yönelik üç çalışmaya ulaşılmıştır. Çalışmalara dahil edilen tüm bebeklerin ailelerine temel bez bakımı konusunda bilgilendirme yapılmıştır. Anne sütü, günde iki/üç kez uygulanmıştır. Literatür incelemesi kapsamına alınan bu çalışmaların sonuçları incelendiğinde; anne sütü uygulamasının sadece temel bakım uygulamasına göre daha etkili olduğu, %1 hidrokortizon merhem uygulaması ile benzer şekilde dermatit şiddetini azalttığı, dermatit şiddetini azaltmada morina karaciğeri yağı ve % 40 çinko oksit içeren bariyer kremden daha az etkili olduğu görülmüştür.

#### Sonuç:

Diaper dermatit tedavisinde anne sütünden yararlanılabilmektedir. Ancak literatürde bu konuya ilişkin oldukça sınırlı sayıda çalışma olup kanıtlar yetersizdir. Diaper dermatit tedavisinde anne sütü kullanımına ilişkin randomize kontrollü çalışmaların yapılması önerilmektedir.

#### Anahtar kelimeler: Diaper dermatit, anne sütü, bakım

# Use of breast milk on diaper dermatitis Aim:

Diaper dermatitis is a contact dermatitis characterized by skin inflammation in the area of the diaper. The prevalence of diaper dermatitis, which is the most common dermatitis in children, varies between 7-35%. Diaper dermatitis treatment has two purposes. These; to accelerate the repair of damaged tissue and prevent recurrence. In order to reduce contact with faecal enzymes, changing the diaper every 3-4 hours in the newborn, and then ventilating to dry the skin is the basis of care. In addition, some additional treatment methods can be used. In this literature review, we aimed to investigate the effect of breast milk use on diaper dermatitis.







# Method:

In this literature review study; Ulakbim Medical Database, Türk Medline and Pubmed databases were screened. In the literature review, for the screening "diaper dermatitis" and "diaper dermatitis and breast milk" were used. Experimental studies published in Turkish and English languages were included in the study.

## **Findings:**

Three studies on breast milk use in diaper dermatitis were reached. The families of all infants included in the studies were informed about basic diaper care. Breast milk was administered two / three times a day. When the results of these studies included in the literature review are examined; It was found that breast milk application was more effective than basic care, it decreased the severity of dermatitis similar to 1% hydrocortisone ointment application, and it was less effective than the barrier cream containing cod liver oil and 40% zinc oxide in reducing the severity of dermatitis.

### **Conclusion:**

Breast milk can be used in the treatment of diaper dermatitis. However, there are very few studies on this subject in the literature and the evidence is insufficient. Randomized controlled trials on the use of breast milk on the treatment of diaper dermatitis are recommended.

Key words: Diaper dermatitis, breast milk, care

# **INTRODUCTION**

Diaper dermatitis is a contact dermatitis characterized by skin inflammation in the area inside the diaper (1). It is classified under ICD-10 with the code L22 and diaper (napkin) dermatitis. This diagnosis can be used in case of erythema, rash and psoriasiform diaper rash (2). It perineal, perianal and surrounding areas; may develop due to moisture, irritation and, lack of ventilation (3). It is a problem that causes discomfort and stress in infants and caregivers. The prevalence of diaper dermatitis, which is the most common dermatitis in children, varies between 7-35% (3, 4). The most common group is children under 24 months. However, the incidence is very high in children between nine and 12 months of age. This result is probably due to the fact that children in this age group need more diapers than children in other age groups (5).

Many factors are effective in the etiology of diaper dermatitis. Some of those; frequency of urination and defecation, type of diaper used, frequency of diaper change, hygiene practices, skin products, diet, medicines (6), wetness and friction, microorganisms (especially candida albicans, Staphylococcus aureus or group A) streptococci), chemical irritants (especially soap, detergent, antiseptics, diaper substances), antibiotics, gastrointestinal diseases such as diarrhea and urinary tract developmental anomalies (7). Diaper dermatitis treatment has two purposes. These; to accelerate the repair of damaged tissue and prevent recurrence. In order to reduce contact with faecal enzymes, changing the diaper every 3-4 hours in the newborn, and ventilating the skin to dry is the basis of care (3, 6). This suggests that diapers should change every three to four hours, a period determined by the frequency with which babies urinate. This means that the diaper needs to be changed six to eight times a day. One of the main factors affecting the prevalence of diaper dermatitis is the frequency of diaper changes. This is because the risk of developing dermatitis increases when urine and feces come into contact with the skin for a long time (5). In diaper dermatitis, some treatment methods can be used in addition to basic care. One of these methods is the use of creams that strengthen the skin barrier. To prevent diaper dermatitis; creams containing odorless moisturizer to restore skin barrier function, which act as a barrier to protect the skin from irritants (urine, feces), and which are effective in treating

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skin infection in the diaper area can be used (5). Breast milk application is one of the methods used in diaper dermatitis. In this literature review, we aimed to investigate the effect of breast milk use on diaper dermatitis. Breast milk application is one of the methods used in the treatment of diaper dermatitis. In this literature review, it is aimed to investigate the effect of breast milk use on diaper dermatitis.

## METHOD

In this literature review study; Ulakbim Medical Database, Türk Medline and Pubmed databases were screened. In the literature review, for the screening "diaper dermatitis" and "diaper dermatitis and breast milk" were used. Experimental studies published in Turkish and English languages were included in the study.

# FINDINGS

In this literature review study, three studies on breast milk use in diaper dermatitis were reached. In the all of these studies the families of all infants were informed about basic diaper care. Breast milk was administered to the dermatitis two / three times a day. When the results of these studies included in the literature review are examined; It was found that breast milk application was more effective than basic care, it decreased the severity of dermatitis similar to 1% hydrocortisone ointment application, and it was less effective than the barrier cream containing cod liver oil and 40% zinc oxide in reducing the severity of dermatitis.

Farahani et al., in their study involving infants with mild to moderate diaper dermatitis (0-24 months), were given general advice on the care of diaper dermatitis (frequent replacement of the diaper, allowing the affected area to dry or ventilate, and gently cleaning the hips at each diaper change). One group received 1% hydrocortisone ointment twice daily (n = 70) and the other group received breast milk (n = 71). Clinical evaluation was performed on 3rd and 7th days. Dermatitis was evaluated using a six-point scale (0: no erythema; 1: mild, diffuse or partial erythema; 2: significant, sharp-bounded erythema; 3: severe erythema without infiltration; 4: serious erythema with infiltration; 5: vesiculation or epidermal defects). As a result of the study, both methods were found to be effective in reducing the severity of dermatitis observed on the 3rd and 7th days (p < .001). The effects of these methods on diaper dermatitis were similar in two groups (8).

GOzen et al. conducted their studies with infants who developed diaper dermatitis in the neonatal intensive care unit. Infants in one group were treated with breast milk (n = 30) and infants in the other group with barrier cream containing cod liver oil and 40% zinc oxide (n = 30). In both groups, the diaper was changed every three hours (eight times a day) and nonalcoholic cotton wipes soaked in water were used for cleaning. Both treatment methods were used for up to five days. Four global clinical impression scales (0 = none, 1 = mild erythema, 2 = large erythema, and 3 = deeper and wider erythema) were used for evaluation. At the end of the study, positive response was obtained in both groups, but barrier cream was found to be more effective than breast milk (3).

Seifi et al. included 30 infants aged 0-12 months in their study. They randomly assigned 15 babies to the control group and 15 babies to the intervention group. Both groups were informed about changing the diapers frequently, cleaning with warm water and drying the area in the diapers. The intervention group was asked to apply breast milk three times a day for five days in addition to these applications. On the first, third and fifth days, the rash severity scale (0 = none, 1 = mild erythema, 2 = moderate erythema, 3 = moderate erythema maceration, 4 = severe erythema pustules or ulceration) was used. There was a statistically significant (p = 0.006) decrease in the mean rash score in the intervention group, but no significant change in the control group (4).







# CONCLUSION

The treatment of diaper dermatitis is important for the relief of infants and caregivers. Breast milk can also be used in the treatment. However, there are only a limited number of studies in the literature on the use of breast milk in the treatment of diaper dermatitis and the evidence is insufficient. Randomized controlled trials on the use of breast milk in the treatment of diaper dermatitis are recommended.

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