

# World Journal of *Clinical Cases*

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## Successful management of a breastfeeding mother with severe eczema of the nipple beginning from puberty: A case report

Rui Li, Li-Xia Zhang, Ce Tian, Liang-kun Ma, Ying Li

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### Abstract

#### BACKGROUND

Nipple eczema is the most common presentation of atopic dermatitis of the breast, which seriously influences breastfeeding of mothers. We here present a case of severe nipple eczema that started in puberty and received continuous care and interventions during pregnancy. The patient succeeded in breastfeeding after the interventions.

#### CASE SUMMARY

A 36-year-old woman at 16 wk of gestation (gestation 1 parturition 0), visited the breastfeeding consultation clinic, complaining of excessive nipple secretion, severe itching, and concerns about breastfeeding. She was diagnosed with severe nipple eczema. Health education, consultation with dermatologists, topical medication, psychological support, and postpartum care were carried out. Through continuous interventions, her nipple eczema significantly improved, lactating confidence enhanced, anxiety symptoms were reduced, and exclusive breastfeeding was achieved.

#### CONCLUSION

For lactating women with nipple eczema, breastfeeding consultants should play an important role in patient education and provide whole-process and individual guidance.

**Key Words:** Atopic dermatitis; Breast feeding; Breastfeeding consultation; Case report

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**Core Tip:** We present a case of severe nipple eczema that started in puberty. Continuous care and interventions were provided during the period from pregnancy to postpartum. Holistic and systematic nursing care was carried out, including health education, breastfeeding guidance, psychological support, and medication administration. The patient succeeded in breastfeeding after the interventions. We believe that this case report will be of great interest and helpful to those engaged in maternal health care, interventions to initiate breastfeeding, and the management of breastfeeding problems, and mothers with impediments to breastfeeding.

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## INTRODUCTION

Breastfeeding is considered the ideal way to feed infants. It provides optimal nutritional and immune protection for infants, helps mothers and infants bond, and provides significant health benefits for mothers[1,2]. According to the World Health Organization, infants should be exclusively breastfed until age 6 mo. However, breastfeeding currently faces many obstacles[3]. For example, nipple discomfort can frustrate mothers, leading to a reduction in the frequency, duration, and even termination of breastfeeding[4,5]. Eczema is one of the causes of skin discomfort[6], and occurs in 1/10 people[7,8]. When the eczema develops in the nipple, it may aggravate the patient's discomfort or even influence the breastfeeding of mothers.

Eczema (atopic dermatitis) is a chronic inflammatory skin disease characterized by itching, dry skin, erythema, exudation, crusting, and lichenification[8]. Eczema most often affects children but also many adults, and can be divided into three types: Endogenous atopic dermatitis, allergic contact dermatitis, and irritant contact dermatitis[9]. Eczema in lactating women is common in the nipples and areola, which is painful, burning, and itchy dermatitis, accompanied by redness and swelling, vesicle rupture, scab, and exudative papules when acute erythema erupts[10]. Repeated scratching can trigger a self-sustaining itch-scratching cycle that reduces quality of life[11].

Eczema of the nipple can occur in female puberty, affect lactation efficiency, and hinder exclusive breastfeeding. Here, we present a case of severe nipple eczema that started in puberty and received continuous care during pregnancy, to provide a reference for nurses to formulate nursing programs.

## CASE PRESENTATION

### Chief complaints

A 36-year-old woman at 16 wk of gestation (gravida 1 parity 0), visited the breastfeeding consultation clinic, complaining of excessive nipple secretion, severe itching, and concerns about breastfeeding.

### History of present illness

Psychological evaluation revealed that the patient was anxious and worried about postpartum breastfeeding. Her breastfeeding efficiency was low.

### History of past illness

Nipple squeezing was performed by her family members according to local customs after she was born, and the skin on the nipple was damaged after the squeezing. Until adolescence, the nipple was itchy, red, painful, and chapped, accompanied by occasional exudation. Rubbing the nipples with a towel relieved the itching. The patient did not seek medical treatment because she was concerned that the dermatologist was male. Until marriage, she went to the breast department for medical treatment at the age of 29, but the breast department did not give treatment and medication. The patient used lanolin cream, which could aggravate the chapping and pain.

### Personal and family history

The patient's relatives had no related diseases.

### Physical examination

Physical examination showed that there were remarkable yellow secretions coming from the cracks on the areola or skin of the nipple, and the nipples were cracked and red (Figure 1A).





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**Figure 1 Physical examination.** A: There were notable yellow secretions, and the nipples were cracked and red before guided treatment; B: Nipple eczema significantly improved after guided treatment 45 d after delivery.

## FINAL DIAGNOSIS

The patient was diagnosed with severe nipple eczema.

## TREATMENT

### Health education

The breastfeeding consultant explained the cause of the disease in order to reduce her stigma, and educated the patient to avoid scratching, rubbing, and other irritating behaviors when feeling itching, avoid using soap and other alkaline cleaning agents to clean the nipple skin, change underwear frequently and wear loose, cotton underwear, eat foods that are light and rich in vitamins and plant protein and avoid alcohol and spicy foods, and avoid high water temperature when bathing (the recommended water temperature is 32 °C-37 °C, and the time is less than 10 min). In addition, dermatologic treatment was suggested.

### Dermatological consultation

The breastfeeding consultant referred the patient to the dermatology clinic. The dermatologist prescribed hydrocortisone butyrate cream for topical application (2 g each time, twice daily), polymyxin B ointment (2 g each time, twice daily), and albolene (20 g each time, three times daily).

### Medication guidance and effectiveness monitoring

According to the dermatologist's advice, the breastfeeding consultant implemented health education and urged the patient to take medication regularly. The breastfeeding consultant continued to follow the patient for 6 mo, monitoring the change of nipple eczema and medication status every week. The patient showed significant improvement and the itching symptoms were alleviated.

### Psychological support

The breastfeeding consultant acquired the patient's mental health status and disease-related feelings through in-depth interviews, and provided appropriate psychological support by implementation of mindful psychological care and teaching the practice of mindful breathing by focusing on breathing and relaxing the body. The breastfeeding consultant encouraged the patient to express her true feelings and listened to her main complaints. The consultant implemented education about breastfeeding, emphasizing the possibility of breastfeeding in patients with nipple eczema and improving breastfeeding efficiency.

### Postpartum continuity of care

The patient had a natural birth on November 3, 2021. The breastfeeding consultant provided one-on-one guidance in the hospital ward on correct breastfeeding posture, and encouraged intermittent use of

Vaseline after breastfeeding in order to prevent cracked nipples. Before the next breastfeeding, Vaseline would be fully absorbed by the skin. So there was no need for the patient to remove the Vaseline from the nipples before breastfeeding. After delivery, the breastfeeding consultant provided continuous online guidance and paid a face-to-face visit to the patient.

## OUTCOME AND FOLLOW-UP

After the continuous monitoring and guidance of the patient, the nipple eczema significantly improved before delivery: The yellow secretion disappeared, the crack relieved, and the pain and pruritus relieved significantly. The patient reported reduced anxiety symptoms. The patient thus enhanced her breastfeeding confidence. After the patient was discharged from hospital, follow-up visits were conducted to offer guidance on the methods of breastfeeding and breast care, so that the woman could successfully achieve exclusive breastfeeding. Nipple eczema significantly improved 45 d after delivery (Figure 1B). Eventually, the patient succeeded in exclusive breastfeeding for 6 mo.

## DISCUSSION

Nipple eczema is the most common presentation of atopic dermatitis of the breast, which seriously affects the breastfeeding of mothers. We present a case of severe nipple eczema that appeared in puberty in a 36-year-old woman. The patient succeeded in exclusive breastfeeding for 6 mo after a series of interventions. Based on our experience in this case, we propose the following points that deserve more attention.

### *Clinical nursing evaluation*

Systematic assessment is the key to nursing measures. A breastfeeding counselor must obtain a complete skin anamnesis, including history of eczema, psoriasis, or other inflammation. The anamnesis needs to begin in adolescence or even in babyhood. Breastfeeding consultants rule out irritant or allergic contact dermatitis by asking about all detergents, soaps, and topical products used by nursing mothers, and asking mothers about food allergies and adding solid foods to the infant's diet, which may trigger breastfeeding allergic contact dermatitis. If conventional eczema treatment fails within 15-20 d, further pathological examination should be performed to exclude eczema-like carcinoma of the nipple[12].

### *Medication guidance*

Breastfeeding consultants should provide whole-course and individualized medication guidance for parturients, so as to improve medication compliance and enhance medication efficacy. Eczematous papillary dermatitis can be treated with a low- to moderate-strength cortisone ointment twice daily for 2 wk. Topical corticosteroid ointments of class V or VI potency are recommended[13]. Topical corticosteroids with class I potency should be avoided. If topical therapies are ineffective, oral corticosteroids for less than 3 wk are acceptable with an interval of 4 h after each dose in the mothers. If the itch is severe, second-generation antihistamines, such as loratadine, are generally safe. Antihistamines are most effective if eczematous dermatitis has an allergic component. When using antihistamines, mothers should be advised to watch their infants for signs of overexposure, including sedation, tachycardia, and dry mouth. Oral doxepin is contraindicated during lactation because it can cause dangerous sedation and respiratory depression in infants[14].

### *Life coaching*

The purpose of breastfeeding guidance is to correct bad breast health habits and eliminate the potential risks of breast diseases. Therefore, breastfeeding counselors should strengthen guidance on patients' lives. As with other types of dermatitis, nipple-specific dermatitis is usually multifactorial. Therefore, breastfeeding counselors need to identify and address each contributing factor. Management should include environmental disinfection in addition to treatment for each infectious cause of mastitis; instruction to place all pacifiers and breast pump shields in the sterilizer[15]; and washing of sheets and bras in hot water. Patients can be instructed to apply moisturizers such as Vaseline[16].

### *Public health education*

Our patient was young at the age of onset of nipple eczema, and her family squeezed her nipples at birth as a local custom, resulting in poor breast health and nipple breakage. In rural China, such a situation often occurs, because it is believed that nipple squeezing at birth can avoid nipple depression in adulthood, and absence of nipple squeezing can affect subsequent lactation[17]. Therefore, breast health promotion in China still needs to be further strengthened. Maternal and child healthcare workers, especially those who work in grass-roots communities, should do a good job of health promotion, to avoid adverse breast hygiene events.

Our patient suffered from nipple redness and pain during puberty, and was ashamed to inform her parents and seek medical treatment, which aggravated the symptoms and delayed treatment. This reminds us of the importance of breast education during adolescence. However, previous breast education studies only focused on breast cancer and breast self-examination among adolescents[18]. Adolescence is a challenging time for girls, when breast development can be embarrassing and confusing, negatively affecting body image, self-esteem, and participation in physical activity. Education on sexual health in school has been shown to increase young people's knowledge and improve attitudes and behavior. However, currently, many international curricula do not provide breast health education beyond adolescent biology[19]. Therefore, it is suggested to add breast health education to students' courses to encourage girls to face up to breast development[20]. According to the report, the most appropriate age to introduce the topic of breasts is 11 years, which is the average age at which breasts begin to develop in all races[19]. Therefore, adolescent breast health should be included in the curriculum of primary schools. Breast health education programs should cover multiple topics such as breast awareness, breast ptosis, breast pain, breast size and changes, proper breast support, and bra fitting.

### **Continuity of care**

Medical staff should pay attention to breast health of peripartum women, strengthen education for pregnant women, pay attention to the stigma related to female breast diseases, and encourage eczema patients to seek medical treatment in time. Breastfeeding clinics should play an important role in referring patients to dermatology clinics[21,22] and paying timely attention to their treatment compliance.

In addition, as eczema of the nipple affects breastfeeding, breastfeeding consultants should urge the patients to receive medication according to doctor's advice, in order to reduce the recurrence rate. Breastfeeding consultants should also provide timely monitoring and comprehensive guidance, including psychological guidance.

### **Focus on mental health**

Unbearable itching in patients with nipple eczema increases mental stress and makes them anxious. In particular, for perinatal nipple eczema, breastfeeding efficiency may be lower due to fear of breastfeeding failure after delivery, and this may aggravate the patient's anxiety. With these patients, breastfeeding consultants should pay attention to the patients' emotions, listen to their complaints, implement psychological therapies such as mindfulness and cognitive intervention[23,24], instruct patients to experience the generation and disappearance of emotions, thoughts, impulses, and thoughts, and guide them to accept them objectively without rejecting or criticizing them. Breastfeeding consultants should instruct patients to perform breathing exercises to reduce anxiety. Puerpera are instructed to deal with stress in a positive way, carry out mindful introspection, patiently feel the inner body and mind, and allow any emotions, physical feelings, and thoughts to fluctuate while ignoring them[25]. In addition, positive support is provided to the spouse[26,27], and psychological counseling can be provided when necessary.

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## **CONCLUSION**

Eczema of the nipple can affect the health of the female breast, so it is necessary to strengthen health education about the female breast from adolescence. For patients with nipple eczema, breastfeeding consultants should play an important role in providing whole-process and individualized guidance. At the same time, attention should be paid to the change in female psychology and give correct psychological support.

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## **FOOTNOTES**

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