

Raynaud Phenomenon of the Nipple: A Clinical Case Report

Carolina Quental; M.D.¹, Daniel Bertoluci Brito; M.D.², João Sobral; M.D.³, Ana Mafalda Macedo; M.D.¹

1 Family Health Unit, Prelada, Porto, Portugal

2 Family Health Unit, Espaço Saúde, Porto, Portugal

3 Family Health Unit, Baltar, Paredes, Portugal

Received January 2023; Revised and accepted May 2023

Abstract

Objective: In Raynaud's phenomenon of the nipple there is a change in color, accompanied by pain or discomfort during breastfeeding.

Case report: A 29-years old female patient, breastfeeding, develops a severe bilateral nipple pain during and after breastfeeding and biphasic change in nipple color, with difficulties in the breastfeeding technique. She was medicated with nifedipine and recommended application of warm compresses to the nipples and use of electric breast pump, showing complete resolution after four weeks of treatment.

Conclusion: Raynaud's phenomenon of the nipple should be considered in breastfeeding women who report nipple pain or discomfort. In clinical practice, nipple pain is a very frequent complaint, and responsible for many cases of early abandonment of breastfeeding. It is therefore essential to make an early diagnosis and implement a correct and immediate treatment.

Keywords: Nipples; Breast Feeding; Raynaud Disease; Vasoconstriction; Nifedipine

Introduction

The Raynaud phenomenon are recurrent episodes of vasospasm, and results from an exaggerated and inappropriate response of the cutaneous circulation due to exposure to cold or emotional stress (1). In its typical presentation, there is a change in skin color, associated with pain, burning sensation or paresthesia (1). The diagnosis is based on the clinical history and physical exam. It usually presents on the extremities of the upper and lower limbs, but it can also affect other body parts, such as the nipple (2). In Raynaud's phenomenon of the nipple there is a

change in color, accompanied by pain or discomfort during breastfeeding. This clinical case intends to reinforce the role of the family doctor in the approach of this clinical entity, since it is a treatable cause of pain during breastfeeding and represents an important risk of stopping breastfeeding (3, 4).

Case report

A 29 years old female patient, healthy and without regular medication, G1P1, with history of uncomplicated evolutionary pregnancy, spontaneously conceived with eutocic term delivery at 40 weeks, without complications. In the second week postpartum, she develops severe bilateral nipple pain during and after breastfeeding, associated with difficulties in the breastfeeding technique.

Correspondence:

Dr. Carolina Quental

Email: carolinaquentalruas@gmail.com



Copyright © 2023 Tehran University of Medical Sciences. Published by Tehran University of Medical Sciences.

This work is licensed under a Creative Commons Attribution-Noncommercial 4.0 International license (<https://creativecommons.org/licenses/by-nc/4.0/>).

Noncommercial uses of the work are permitted, provided the original work is properly cited.

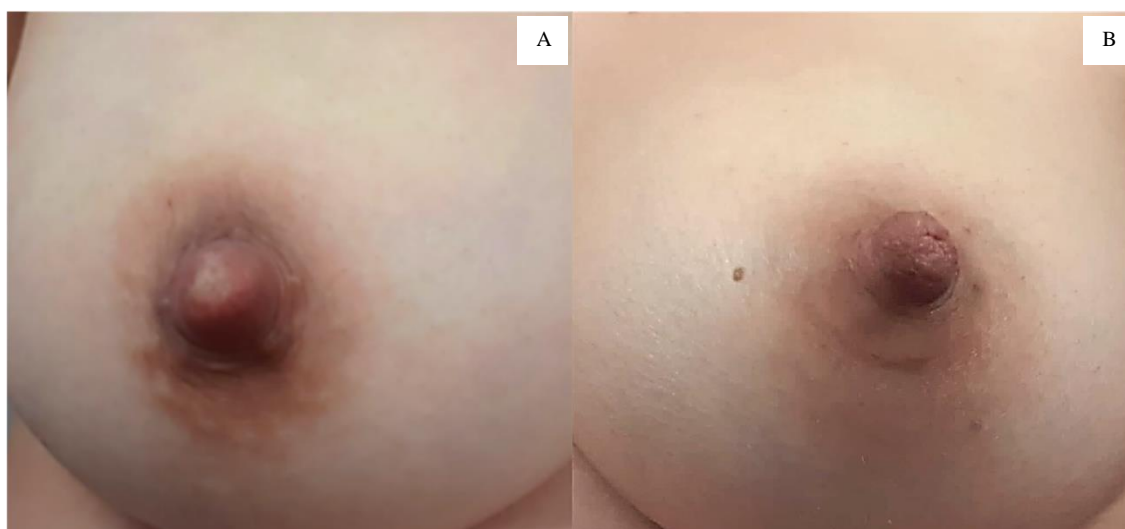


Figure 1: A. Clinical image of nipple's Raynaud Phenomenon after breastfeeding versus B. Clinical image of the same nipple after treatment

One month after the onset of symptoms, she went to a physician who, on physical examination, observed a pale and whitish nipple, with no other changes (Figure 1A), initiating treatment with an oral antifungal. In the newborn's 2-month consultation with the Family Doctor, she reports persistence of nipple pain complaints, describing concomitant biphasic change in nipple color (pallor and, later, blushing), assuming the diagnosis of Raynaud's phenomenon of the nipple. The application of warm compresses to the nipples after feedings and the use of electric breast pump were recommended, with some transient relief. In a reassessment visit, she was medicated with nifedipine, showing a good response and complete resolution of the complaints after four weeks of treatment (Figure 1B).

Discussion

Raynaud's phenomenon of the nipple should be considered in breastfeeding women who report nipple pain or discomfort. Despite the few reported cases, the diagnosis of this clinical entity is possible through a complete clinical history and physical examination of the mother and newborn. Treatment is based on local techniques, avoidance of vasoconstrictors such as nicotine and caffeine, and pharmacotherapy with nifedipine, a calcium channel blocker that is safe for breastfeeding women.

Conclusion

Nipple pain can be attributed to a variety of etiologies and is usually the result of a cascade of events (1, 4).

In clinical practice, it is a very frequent complaint, being responsible for many cases of early abandonment of breastfeeding or its exclusivity (5). It is therefore essential to make an early diagnosis and implement a correct and immediate treatment, promoting the maintenance of breastfeeding and its exclusivity until six months of age, due to the inherent benefits (6), as recommended by the World Health Organization (7).

Conflict of Interests

Authors declare no conflict of interests.

Acknowledgments

None.

References

1. Barrett ME, Heller MM, Stone HF, Murase JE. Raynaud phenomenon of the nipple in breastfeeding mothers: an underdiagnosed cause of nipple pain. *JAMA Dermatol.* 2013;149(3):300-6.
2. Morino C, Winn SM. Raynaud's phenomenon of the nipples: an elusive diagnosis. *J Hum Lact.* 2007;23(2):191-3.
3. Garrison CP. Nipple vasospasms, Raynaud's syndrome, and nifedipine. *J Hum Lact.* 2002;18(4):382-5.
4. Wu M, Chason R, Wong M. Raynaud's phenomenon of the nipple. *Obstet Gynecol.* 2012;119(2 Pt 2):447-9.
5. Anderson JE, Held N, Wright K. Raynaud's phenomenon of the nipple: a treatable cause of painful breastfeeding. *Pediatrics.* 2004;113(4): e360-4.
6. Neville MC, Anderson SM, McManaman JL, Badger

Nipple's Raynaud Phenomenon

TM, Bunik M, Contractor N, et al. Lactation and neonatal nutrition: defining and refining the critical questions. *J Mammary Gland Biol Neoplasia*. 2012;17(2): 167-88.

7. World Health Organization. Global strategy for infant and young child feeding. Geneva (Switzerland):WHO; 2003.

Citation: Quental C, Brito DB, Sobral J, Macedo AM. **Raynaud Phenomenon of the Nipple: A Clinical Case Report.** *J Family Reprod Health* 2023; 17(2): 113-5.