


Neonatal Sucking Blister and Sucking Pads: Coexisting Simultaneously in a 24 Hour Old Newborn

Gashaw Arega , Selamawit Daniel Admasse, Desalegn Alemneh

Addis Ababa University, School of Medicine, Department of Pediatrics and Child Health, Addis Ababa, Ethiopia

Correspondence: Gashaw Arega, Addis Ababa University, School of Medicine, Department of Pediatrics and Child Health, P.O. Box: 9080, Addis Ababa, Ethiopia, Tel +251911417235, Email gashawarega@gmail.com

Abstract: Neonatal sucking blisters usually present as benign skin erosions involving the distal upper extremities at birth presumably induced by vigorous sucking in utero, whereas sucking pads commonly appear as hyperkeratotic thickening of the lips indicating effective neonatal sucking reflex. These benign neonatal conditions should be differentiated from other serious systemic and dermatological diseases in newborns through their clinical manifestations and self-limited course. Here, we report a 24 hour old male newborn with a sucking blister and sucking pads present at birth coexisting simultaneously, diagnosed based on the presentation and benign course. A high index of clinical suspicion is required to avoid unnecessary investigations and treatment.

Keywords: newborn, neonatal sucking blisters, sucking pads

Background

Neonatal sucking blisters clinically appear as unilateral or bilateral symmetrical skin erosions involving the distal upper extremities at birth, presumably induced by vigorous sucking on the affected part in utero.¹ Whereas sucking pad is a combination of intracellular edema and hyperkeratotic thickening of the lips.² It occurs at the inner aspect of the vermilion border of the lips of the newborn due to friction in terms of effective sucking.³ The presence of neonatal sucking blister and sucking pad indicates that the newborn has intact motor neuron function and effective sucking. It is considered a neonatal screening tool.^{2,3} Here, we report a 24 hour old newborn with sucking blisters on bilateral distal forearms and sucking pads present at birth, coexisting simultaneously.

Case Presentation

The case was a 24 hour old male newborn, born to a para II mother at 41 weeks gestational age via spontaneous vaginal delivery, weighing 3600 grams with APGAR score of 8 and 9 at first and fifth minutes respectively. The pregnancy was uneventful and no abnormalities were detected on prenatal follow-up. The labor started spontaneously, lasted 06 hours with intrapartum rupture of membrane. The newborn was attached to breast, sucking well and active. The newborn was referred to neonatal intensive care unit from obstetrics ward for evaluation of skin erosions over bilateral hands by the pediatricians.

Neonatal physical examination revealed active, pink, and well-hydrated newborn. On pertinent physical examination there was a well-defined hypertrophied and lichenified upper lip at the vermilion border in the center with whitish peeling lesion and it was compatible with a sucking pad [Figure 1].

The examination also revealed a deep erosion measuring (2.0×1.0 cm) on the distal aspect of the left forearm and sloughed off skin erosions on the right distal arm which was present at birth [Figure 2].

His other physical examination was otherwise normal. Complete blood count and CRP were non-revealing. No treatment was given and the erosion had completely resolved when he came to clinic after two weeks. The lesion was diagnosed as a neonatal sucking blister according to its presentation and self-limited course.

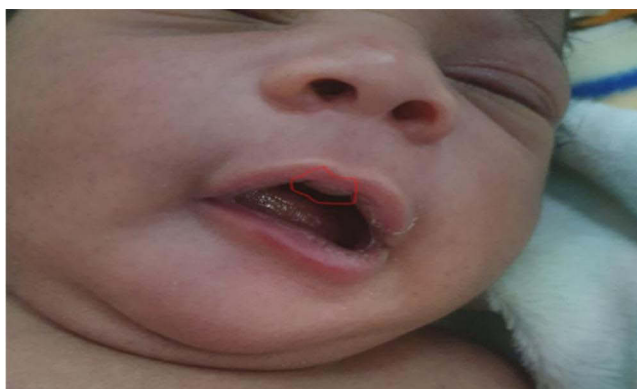


Figure 1 Well developed sucking pads on the upper lip.



Figure 2 Neonatal sucking blister on the distal aspect of the forearm.

Case Discussion

Neonatal sucking blisters appearing as solitary or scattered superficial bullae present on the upper limbs of an infant at birth are presumably induced by vigorous sucking on the affected part in utero.¹ The lesions are located mainly on the forearm, wrist, and hand, including the dorsal thumb and index fingers.⁴ The diagnosis of neonatal sucking blisters is a diagnosis of exclusion. The absence of any lesions in other body regions, the timing of onset, and the rapid resolution of the blisters in a healthy newborn is highly suggestive of the cause of the phenomenon. The sucking pads are the combination of epithelial hyperplasia due to the effects of an adaptive mechanism of sucking and intracellular edema due to the effects of a pressure gradient that arises in the tissue as a result of the dynamic effects of sticking while sucking.³ And these neonatal sucking problems resolve rapidly without any complications and sequelae.

Conclusion

In summary, neonatal suckling blisters and sucking pads are benign neonatal conditions and do not require any investigations and treatment.

However, despite their harmlessness they may cause intense anxiety to health professionals and families who are unfamiliar with these clinical entities. A few cases have been reported so far and being familiar with these self-limited conditions might help to establish the diagnosis and avoid unnecessary treatment. And families should be reassured about the nature of the self-limiting course.

Ethical Clearance

Written informed consent for publication of the details including the images was obtained from the parents. In addition, ethical clearance was obtained from Tikur Anbessa Hospital, Addis Ababa University.

Funding

There is no funding to report.

Disclosure

There are no conflicts of interest.

References

1. Morelli JG. Diseases of the neonate. In: Kliegman RM, Stanton BF, St. Geme JW, Schor NF, Behrman RE, editors. *Nelson Textbook of Pediatrics*. 3rd ed. Saunders Elsevier; 2011:2218–2220.
2. Heyl T, Raubenheimer EJ. Sucking pads (sucking calluses) of the lips in neonates: a manifestation of transient leukoedema. *Pediatr Dermatol*. 1987;4(2):123–128. doi:10.1111/j.1525-1470.1987.tb00765.x
3. Hendrik HD. Sucking-pads and primitive sucking reflex. *J Neonatal Perinatal Med*. 2013;16(4):281–283. doi:10.3233/NPM-1372413
4. Monteagudo B, León-Muñoz E. Neonatal sucking blisters. *Indian Pediatr*. 2010;47:784. PMID: 21048267.

Research and Reports in Neonatology

Dovepress

Publish your work in this journal

Research and Reports in Neonatology is an international, peer-reviewed, open access journal publishing original research, reports, editorials, reviews and commentaries on neonatal health. The manuscript management system is completely online and includes a very quick and fair peer-review system. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <http://www.dovepress.com/research-and-reports-in-neonatology-journal>