

# Neonatal sucking blister

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## Abstract

Neonatal sucking blisters result from vigorous sucking on hand or forearm in utero. Clinically, one observes a tense, fluid-filled blister, which when ruptured forms an erosion. We report a female neonate with a sucking blister on the distal dorsal aspect of her left forearm. These benign bullae should be differentiated from other diseases of the newborn through their presentation, characteristic morphology, and self-limiting course.

*Keywords: sucking, blister, neonate*

## Introduction

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 resolve without treatment within days to weeks. The focal presentation, characteristic morphology and failure to develop other vesicles or bullae during the first days of life help to establish correct diagnosis [2]. Here we report a newborn with a sucking blister on her distal forearm, which developed during intrauterine life.

## Case Synopsis

A female neonate, who was the third child of healthy parents, was born at 39 weeks gestation

with a birth weight of 2900g via spontaneous vaginal delivery to a 34-year-old mother. The pregnancy was uncomplicated and no abnormalities were detected on prenatal examinations. Examination just after birth revealed an erosion (2.0×1.5 cm) on the distal dorsal aspect of her left forearm (**Figure 1**). Her physical examination was otherwise normal. No treatment was given and the erosion was completely resolved when she came to clinic after one week. The lesion was diagnosed as a neonatal sucking blister according to its presentation,



**Figure 1.** Neonatal sucking blister on the distal dorsal aspect of the left forearm.

characteristic morphology, and self-limiting course.

## Case Discussion

Sucking blisters result from vigorous sucking by an infant during fetal life, and are present at birth. The lesions are located mainly on the forearm, wrist, and hand, including the dorsal thumb and index fingers and can be unilateral or bilateral and symmetrical [2]. Although an estimated incidence of 1:250 live births was proposed, it is believed that the true incidence is lower [3, 4].

The diagnosis of congenital sucking blisters is a diagnosis of exclusion. The absence of lesions in other body regions, the timing of onset, and the rapid resolution of the blisters in combination with the otherwise well appearance of the neonate are highly suggestive of the cause of the phenomenon [5]. These bullae resolve rapidly without sequelae and should be distinguished from sucking pads, which are found on the lips in the first few months and are caused by combined intracellular edema and hyperkeratosis. The diagnosis can be confirmed by observing the

neonate sucking the affected area [1]. The lesions of neonatal sucking blister clear in days to weeks without specific treatment [2].

Congenital or neonatal herpes simplex virus infection, fetal or neonatal varicella, bullous impetigo, congenital

syphilis, or candidiasis might also be confused with sucking blisters. Rarely, neonatal lupus erythematosus, hereditary bullous diseases, and epidermolysis bullosa should be considered, and appropriate tests may need to be performed [5].

## Conclusion

Neonatal sucking blisters are rarely seen and may cause anxiety to clinicians who are unfamiliar with this entity. Only a few cases have been reported so far and being familiar with this benign and self-limited condition might help to establish the correct diagnosis and avoid unnecessary diagnostic interventions.

## Potential conflicts of interest

The authors declare no conflicts of interests.

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