



# Reversible Infant Onychomadesis : Case Report and Review of Literature

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## Abstract

Onychomadesis is a periodic idiopathic shedding of the nails beginning at the proximal end, possibly caused by the temporary arrest of the function of the nail matrix. Infections, stress in utero has been reported as the initiating factor in each of this entities. We report a one year-old infant, affected by onychomadesis, occurred after cesarean childbirth following Stresses in utero by severe maternal pyelonephritis.

**Keywords:** Nails; Onychomadesis; Infection; Stresses in Utero; Neonatal

## Introduction

Onychomadesis is characterized by separation of the nail plate from the matrix with persistent attachment to the nail bed. It can occur in children of all ages including neonates [1]. Onychomadesis has been associated with, autoimmune disease, critical illness, and medications [1-7]. In childhood, onychomadesis is sometimes linked with hand-foot-and-mouth disease scarlet fever, varicella virus fungal infection and, stresses in utero. We report a case of infant onychomadesis affected following stresses in utero.

## Case Presentation

A 4-month-old boy from not consanguinity marriage, pregnancy well followed complicated 4 weeks before the birth of a severe pyelonephritis requiring delivery by caesarean section. was referred to our dermatology unit for the presence of onychomadesis on the 1th, 3th and 4th nails of both hands and legs, which appeared 6 weeks after preterm birth on severe maternal pyelonephritis. Examination of the infant revealed a proximal elevation of the nail bed with yellow hyperkeratotic bands extended across most of his fingernails (Figure 1,2). Infection was excluded, and spontaneous regrowth of a new normal nail is seen within a 2 months (Figure 3,4), without any therapy and without recurrence.



**Figure 1** Onychomadesis of the thumb and third and fourth digits of the right hand, with complete shedding and regrowth of the second and fifth digits.



**Figure 2** Onychomadesis of the toe nails.



**Figure 3** Spontaneous resolution after 2 months.

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**Figure 4** Spontaneous resolution after 2 months.

## Discussion

Onychomadesis is the proximal separation of the nail plate from the nail matrix due to a temporary cessation of nail growth. It can occur in children of all ages including neonates [1]. Diagnosis is made clinically through palpation and inspection of the nail plate. Physicians should consider underlying associations [1-7]. A review of the patient's history for any viral illnesses 1 to 2 months prior to nail changes often will help identify the causative disease. Onychomadesis typically is mild and self-limited [2,3,7]. There is no specific treatment, but a conservative approach to management is recommended with treatment of any underlying causes and topical applications under occlusion of either 40% urea or halcinonide 0.1% [3]. Spontaneous nail regrowth usually occurs within 12 weeks and may occur faster in children. In this article, causes of onychomadesis are described, including the connection between stresses in utero and onychomadesis [1,4,7]. We also explore several theories of possible mechanisms for onychomadesis; however, the precise mechanism remains unclear and further investigation is needed [1-5,6].

## Conclusion

Fortunately, onychomadesis is self-limited. Physicians should look for underlying causes of onychomadesis, including a history of infections and stresses in utero. Patients are reassured when they gain an understanding of the cause of these distressing nail disorders and the rationale for avoiding etiologic factors whenever possible. The choice of treatment or nontreatment is dictated by the nature of each condition.

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